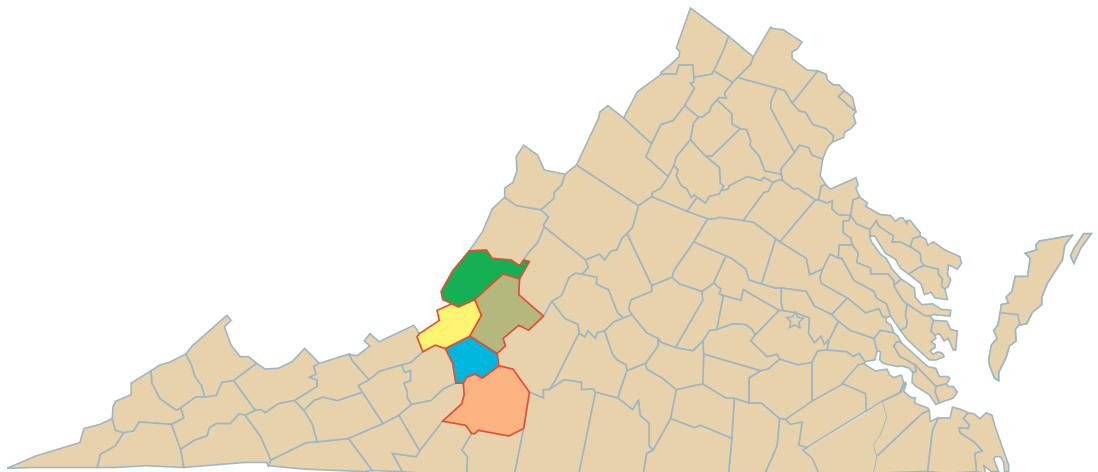
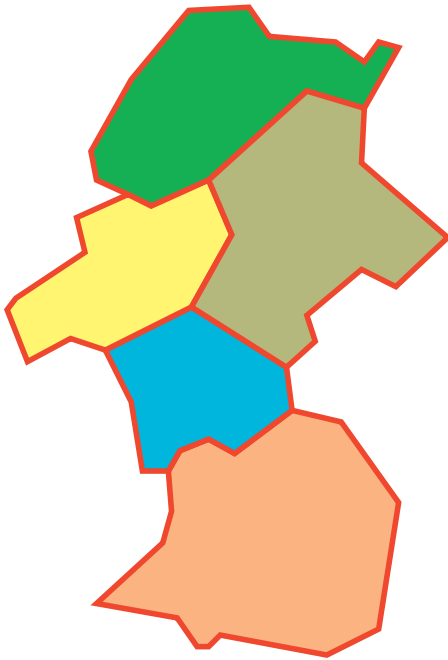


Community Profile of WIA III

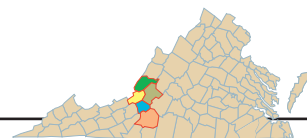
Alleghany County • Botetourt County • Craig County • Franklin County • Roanoke County • City of Covington • City of Roanoke • City of Salem





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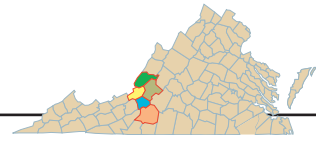
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Executive Summary

This report provides a demographic, economic, and educational profile of Workforce Investment Area III (WIA III), Western Virginia. The purpose of these profiles is to assist on-going strategic planning efforts by providing a solid, data-driven, foundation for strategic decision-making. The primary findings from this report are:

- Between 2000 and 2010, WIA III will experience a major increase in its 55 and over population. The net result of this trend will be a significant “graying” of the overall population.
- One implication of this trend is that younger entry-level workers will be in short supply.
- WIA III is experiencing, and will likely continue to experience, a shift away from employment in Manufacturing and toward employment in Services and Retail Trade.
- One implication of this shift is that the Service sector – specifically, health care and education – is expected to account for much of the demand for trained workers between 1998 and 2008.
- Another implication is likely downward pressure on wages. Whereas Manufacturing comprised the 7th highest wage sector in the local economy, Retail Trade ranks 18th, Education 15th, and Health 10th.

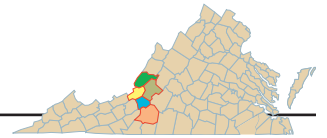


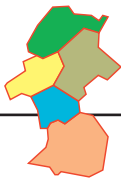


I. Introduction

This report provides a community profile of Workforce Investment Area III (WIA III). It was produced by the Virginia Employment Commission, with assistance from the Virginia Community College System and the Virginia Economic Development Partnership, at the request of the Special Advisor to the Governor for Workforce Development. It is intended to assist on-going strategic planning efforts within the Workforce Investment Boards by providing a solid, data-driven, foundation for strategic decision-making.

The report is divided into four major sections. The first contains a profile of regional demographic characteristics and trends, the second supplies similar information for the regional economy, and the third provides a profile of regional education characteristics and projected demands for training and skills. These are followed by a summary and conclusion section.

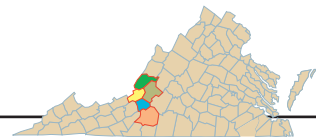




II. Demographic Profile

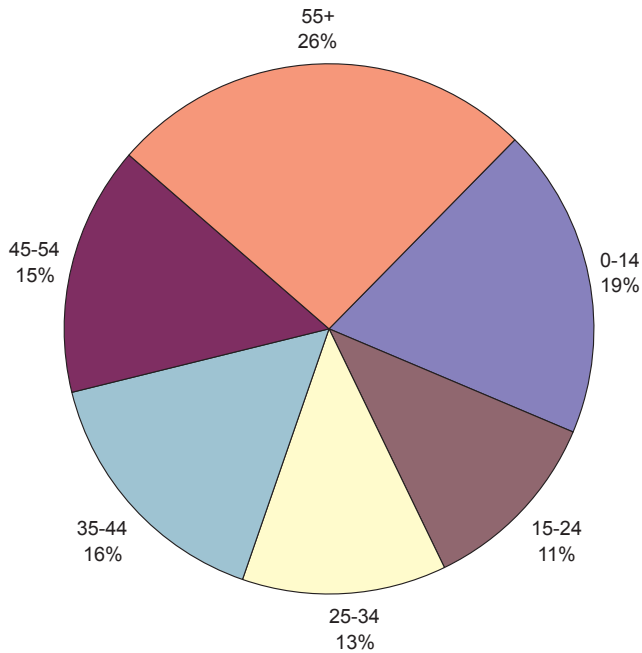
Population demographics are the single most important factor affecting WIA III's future labor force. Some key features of the area's population are as follows:

- Tends to be slightly older. Where statewide individuals who are 55 and older comprise 20 percent of the population, in WIA III they comprise 26 percent of the population.
- Smaller proportion of minorities. Where statewide minorities comprise 28 percent of the overall population, in WIA III they comprise 15 percent of the population.
- Projected to increase by 12,773 persons (or 4.1 percent) between 2000 and 2010. The largest increase is expected in Franklin County (5,914), followed by Roanoke County (4,722), and Botetourt County (3,504). The cities of Covington and Roanoke are projected to lose population over the period (-303 and -1,511 respectively).
- Smaller proportion of individuals who "speak English less than well". Where statewide the proportion of individuals five and older who speak English less than well is 2.2 percent, in WIA III it is only 0.6 percent.
- The city of Roanoke draws the largest number of in-commuters (42,478) of any locality within WIA III, followed by Roanoke County (20,247) and the city of Salem (16,767). In all cases, the majority of these commuters originate from within WIA III. On the whole, WIA III is a net importer of workers with 21,208 individuals commuting into the area for work, while 9,591 of the area's residents commute to localities outside of WIA III for work.

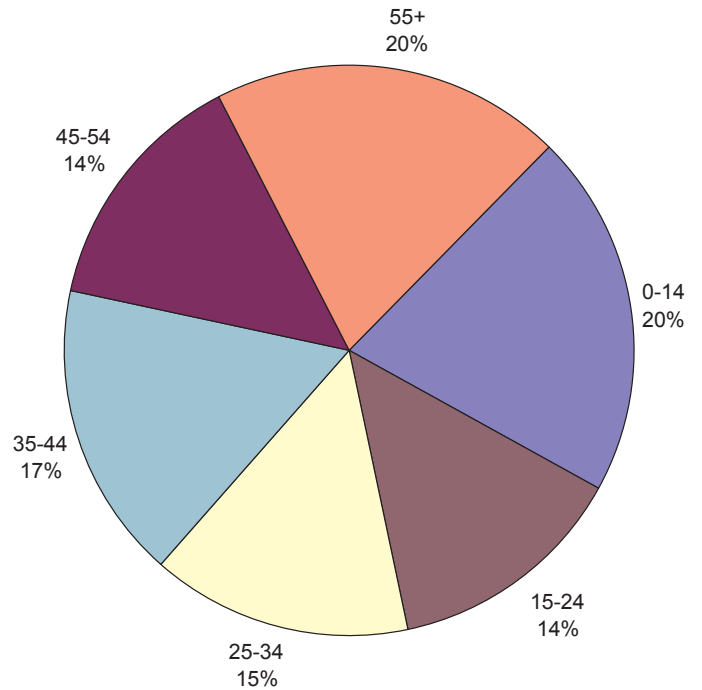


Population by Age Cohort

WIA III



Virginia



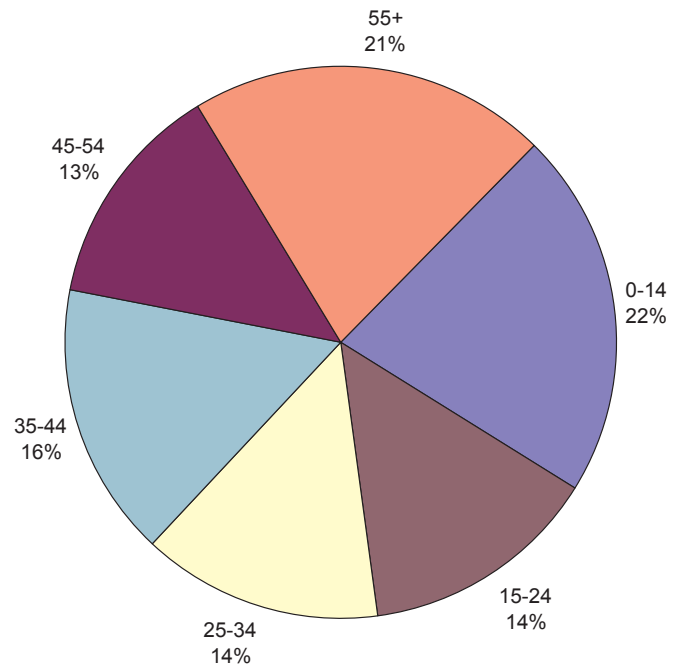
WIA III

0-14	58,489
15-24	35,526
25-34	39,608
35-44	49,429
45-54	47,407
55+	81,368
Total	311,827

Virginia

0-14	1,453,452
15-24	963,469
25-34	1,036,911
35-44	1,200,950
45-54	999,548
55+	1,424,169
Total	7,078,494

United States



United States

0-14	60,253,375
15-24	39,183,890
25-34	39,891,724
35-44	45,148,527
45-54	37,677,952
55+	59,266,437
Total	281,421,906

Subparts may not add to total due to rounding.
Source: 2000 Census.

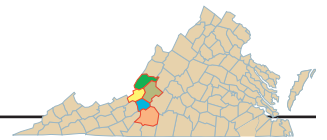


Population by Race/Ethnicity

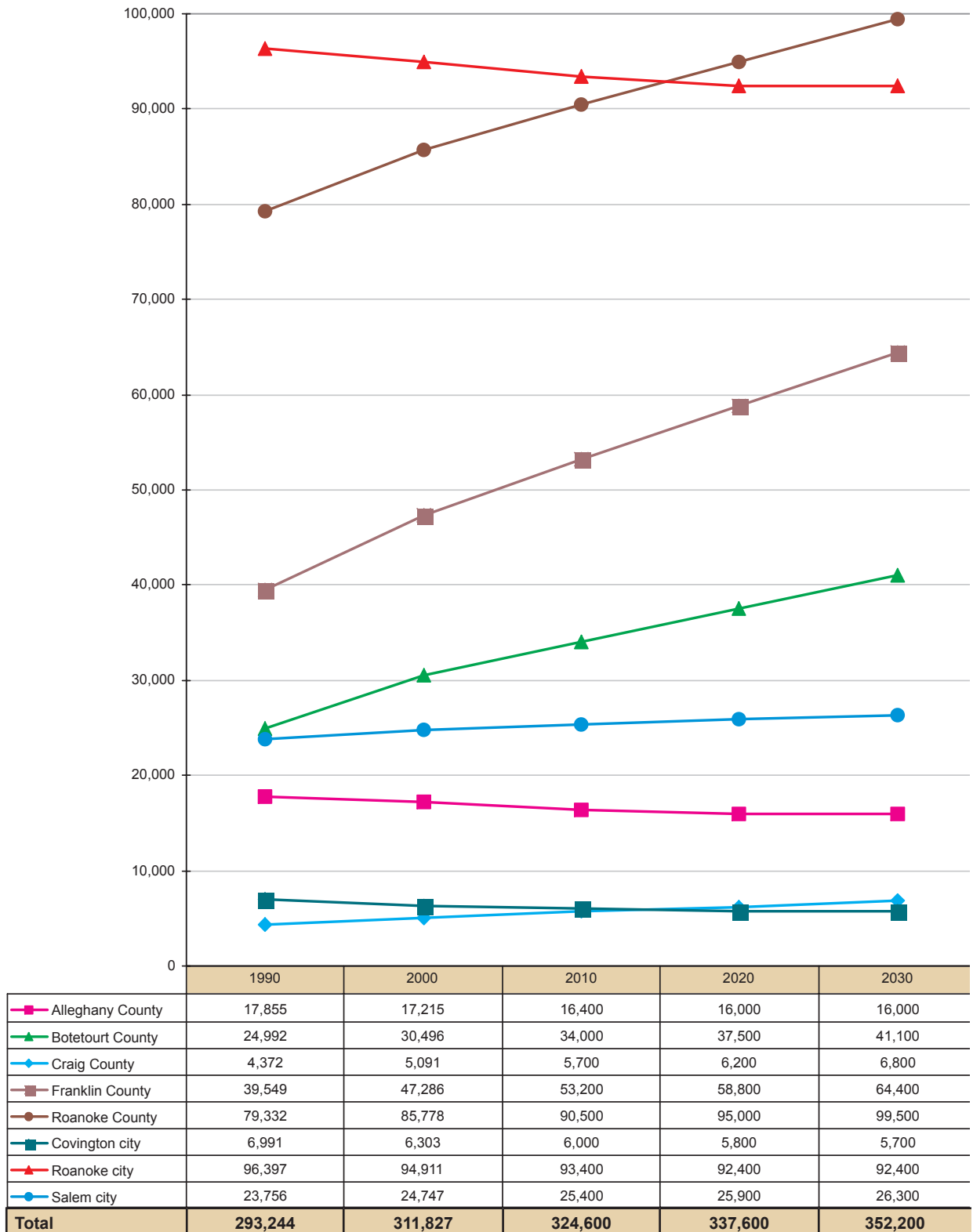
WIA III		
Total Population	311,827	100.0%
Race		
White	266,252	85.4%
Black or African American	36,986	11.9%
American Indian and Alaska Native	546	0.2%
Asian	3,109	1.0%
Native Hawaiian and Other Pacific Islander	58	—
Other and Multi-Race	4,876	1.6%
Ethnicity		
Hispanic or Latino (of any race)	3,394	1.1%

Virginia		
Total Population	7,078,515	100.0%
Race		
White	5,120,110	72.3%
Black or African American	1,390,293	19.6%
American Indian and Alaska Native	21,172	0.3%
Asian	261,025	3.7%
Native Hawaiian and Other Pacific Islander	3,946	0.1%
Other and Multi-Race	281,969	4.0%
Ethnicity		
Hispanic or Latino (of any race)	329,540	4.7%

United States		
Total population	281,421,906	100.0%
Race		
One race	274,595,678	97.6%
White	211,460,626	75.1%
Black or African American	34,658,190	12.3%
American Indian and Alaska Native	2,475,956	0.9%
Asian	10,242,998	3.6%
Native Hawaiian and Other Pacific Islander	398,835	0.1%
Other and Multi-Race	22,185,301	7.9%
Ethnicity		
Hispanic or Latino (of any race)	35,305,818	12.5%



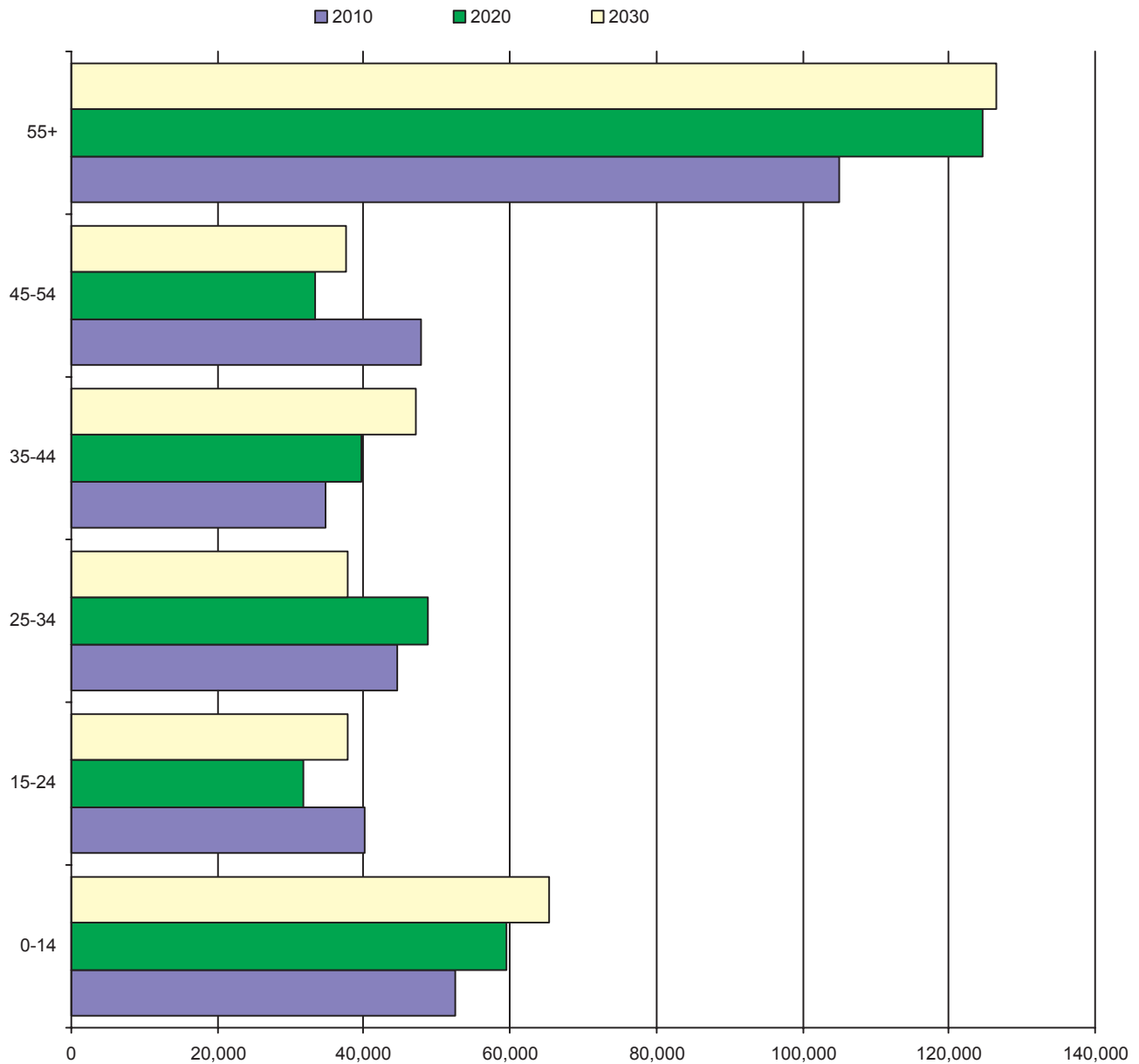
Population Change



Data for 2010 - 2030 are projections. Subparts may not add to total due to rounding.
Source: Virginia Employment Commission, 08/03, U.S. Census Bureau.



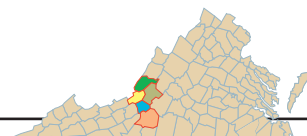
Population Projections by Age Cohort



	2010	2020	2030
0-14	52,540	59,427	65,340
15-24	40,052	31,727	37,733
25-34	44,501	48,853	37,916
35-44	34,804	39,674	47,034
45-54	47,771	33,396	37,605
55+	105,023	124,523	126,572
Total	324,600	337,600	352,200

Subparts may not add to total due to rounding.

Source: Virginia Employment Commission.



English Language Skills

(Age 5 and over)

WIA III		
	Total	Speak English less than well
Alleghany County	12,202	38
Boutetourt County	28,758	78
Craig County	4,828	7
Franklin County	44,747	191
Roanoke County	81,272	570
Covington city	5,901	44
Roanoke city	88,721	882
Salem city	23,542	60
WIA III	289,971	1,870
Virginia	6,619,266	143,865
<i>Percent of Individuals who speak English less than well</i>		
Virginia	2.17%	
WIA III	0.64%	



Commuting Patterns¹

In-Commute (To)																
	Alleghany	Botetourt	Craig	Franklin	Roanoke Co.	Covington	Roanoke city	Salem	Total From County/ City To WIA III	Other VA Localities	West Virginia	Other Out of State	Total From County/ City:	Total In State	Total Out of State	
Out-Commute (From)	Alleghany		59		37	896	134	27	1,153	1,080	119		2,352	2,233	119	
	Botetourt	240		12	29	2,387	58	5,563	9,295	855			10,150	10,150	0	
	Craig	15	39			448	9	475	1,394	390			1,784	1,784	0	
	Franklin		163			1,656		3,810	6,320	2,909		59	9,288	9,229	59	
	Roanoke Co.		831	37	476			19,447	27,233	1,761			28,994	28,994	0	
	Covington	1,566	39			16		52	1,673	333	21	10	2,037	2,006	31	
	Roanoke city		768	15	274	8,625	24		15,115	1,510			16,625	16,625	0	
	Salem		109	10		2,365		3,501	5,985	523		21	6,529	6,508	21	
Total To County/City From WIA III	1,821	2,008	74	779	15,534	987	32,982	13,983								
Other VA Localities	905	891	14	1,225	4,713	190	9,422	2,677								
West Virginia	659	81	19			129	74	57								
Other Out of State	64	10		18		10		50								
Total to County/City:	3,449	2,990	107	2,022	20,247	1,316	42,478	16,767								
Total In State	2,726	2,899	88	2,004	20,247	1,177	42,404	16,660								
Total Out of State	723	91	19	18	0	139	74	107								

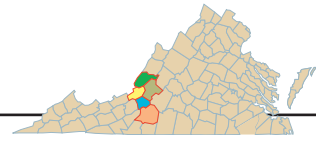
Total WIA Commuting ²	
Total Commuting To WIA:	21,208
Total Commuting From WIA:	9,591

Source: "In-Commuting Patterns" and "Out-Commuting Patterns," 2000 Census data, Virginia Employment Commission, http://www.vec.state.va.us/vecportal/lbrmkt/lmi_menu.cfm

1. Empty cells within the table indicate that the area's commuting represents less than .2% of total commuting or may be zero.
2. Total Commuting to/from WIA= Other VA Localities + Out of State

Example of how to use the Commuting Patterns table:

"How many of Covington's residents commute to Alleghany County?" On the horizontal or To axis, locate the column labeled Alleghany. On the vertical or From axis, locate the row labeled Covington. The intersection of the row and column, 1,566, is the number of Covington's residents that commute to Alleghany County.

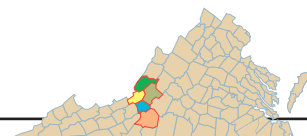




III. Economic Profile

Where population demographics provide information on underlying trends within the labor force, economic data provides more detailed information on the likely demand for specific types of workers. Some key features of WIA III's economy are as follows:

- Unemployment rates are slightly above the statewide average. Since 1998, WIA III's unemployment rate has been slightly above the statewide average. At its peak in 2000, the gap between the two was 1.3 percent (3.5 percent vs. 2.2 percent).
- Employment is concentrated in Retail Trade (13.9 percent), Manufacturing (13.8 percent), Government (13.3 percent), and Health Care (11.7 percent).
- Most new hires have been in Services (42.0 percent) and Retail Trade (40.6 percent).
- Overall personnel turnover is slightly below the statewide average (12.1 percent vs. 13.2 percent). Personnel turnover tends to be highest in Services (15.2 percent), followed by Retail Trade (15.1 percent) and Construction (12.7 percent).
- Weekly wages were highest in Management (\$1,032), followed by Utilities (\$978), Federal Government (\$976), Finance/Insurance (\$903), Information (\$799), and Professional/Technical Services (\$792).
- Industries with the largest proportion of workers at or near retirement age (55 and above) are Manufacturing (17.6 percent), Mining (16.6 percent), Services (16.1 percent), and Wholesale Trade (15.7 percent).
- Employment projections indicate that between 1998 and 2008, most employment growth will occur in Services (13,458 additional jobs) and Retail Trade (4,599 additional jobs). In contrast, Manufacturing is projected to lose 1,142 jobs and Federal Government 223.
- Employment projections also indicate that between 1998 and 2008, the biggest growth in occupational employment will be in Hand Packers and Packagers (820 openings), Telemarketers (690 openings), Guards (670 openings), and Systems Analysts (540 openings). Alternatively, the biggest declines in occupational employment will be in Sewing Machine Operators and Textile Machine Operators.
- Based on January 2004 Unemployment data, the largest pools of available workers are in the Office and Administrative Support, Production, Construction and Extraction, Sales, and Transportation and Materials Moving occupations.



Unemployment Rate Trends



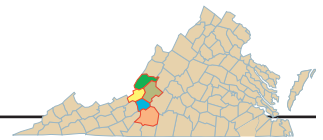


Employers by Size of Establishment

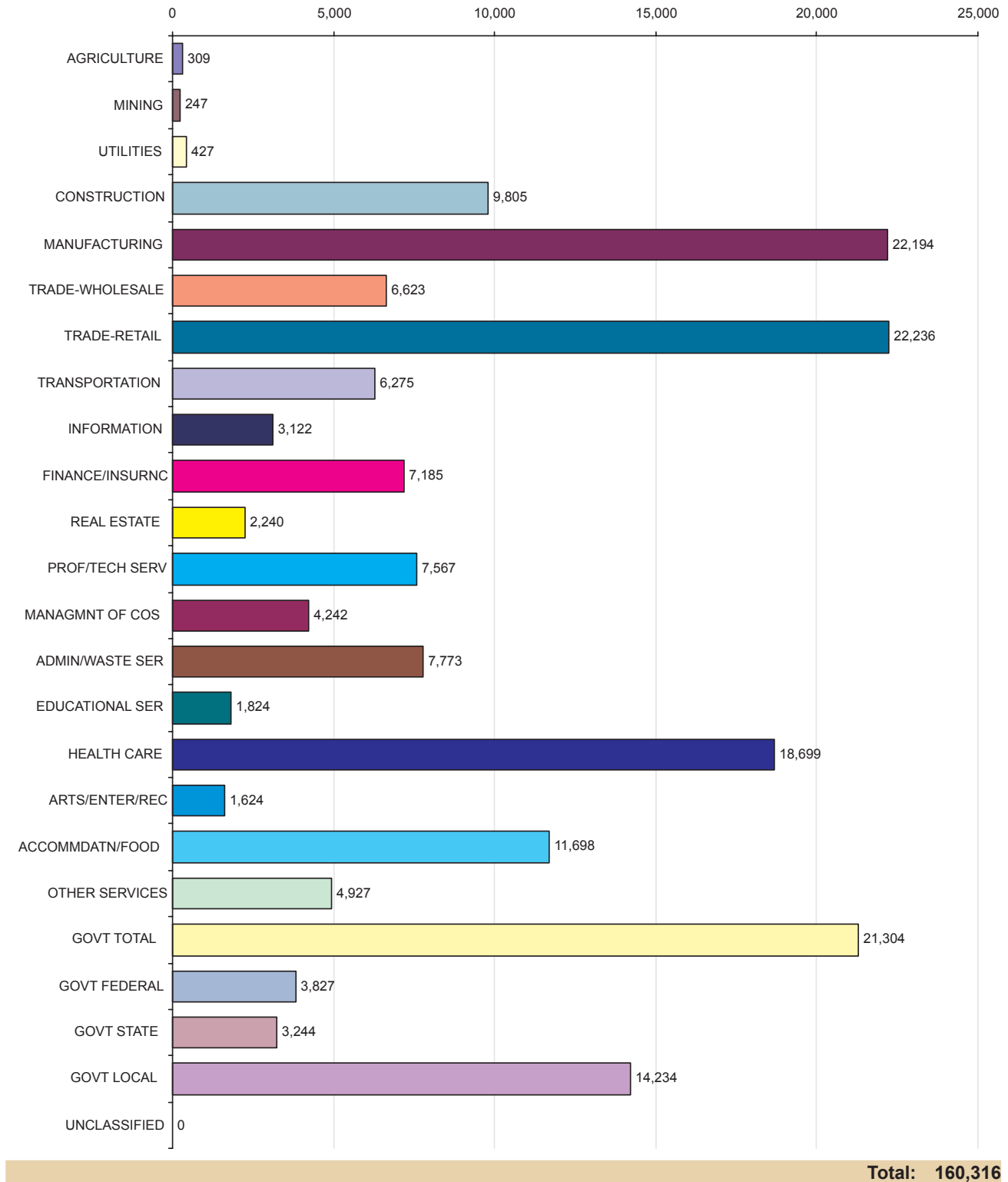
Number of Employees	WIA III	Virginia
0 - 4	4,369	107,195
5 - 9	1,832	35,763
10 - 19	1,154	25,141
20 - 49	872	18,074
50 - 99	309	6,136
100 - 249	158	3,388
250 - 499	52	1,029
500 - 999	17	409
1000 +	10	229
TOTAL	8,773	197,364

Employment by Size of Establishment

Number of Employees	WIA III	Virginia
0 - 4	8,496	188,377
5 - 9	12,105	238,634
10 - 19	15,692	340,363
20 - 49	26,876	553,221
50 - 99	21,319	422,392
100 - 249	24,377	503,348
250 - 499	18,064	352,727
500 - 999	11,126	274,493
1000 +	16,496	543,583
TOTAL	154,552	3,417,138



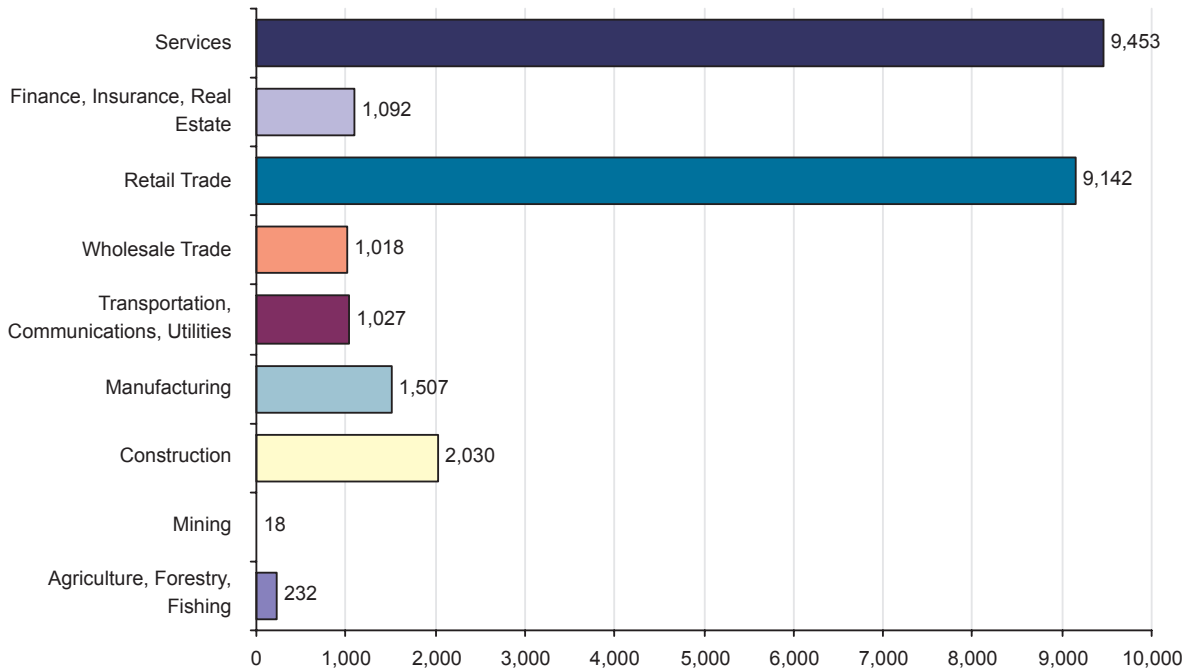
Employment by Industry





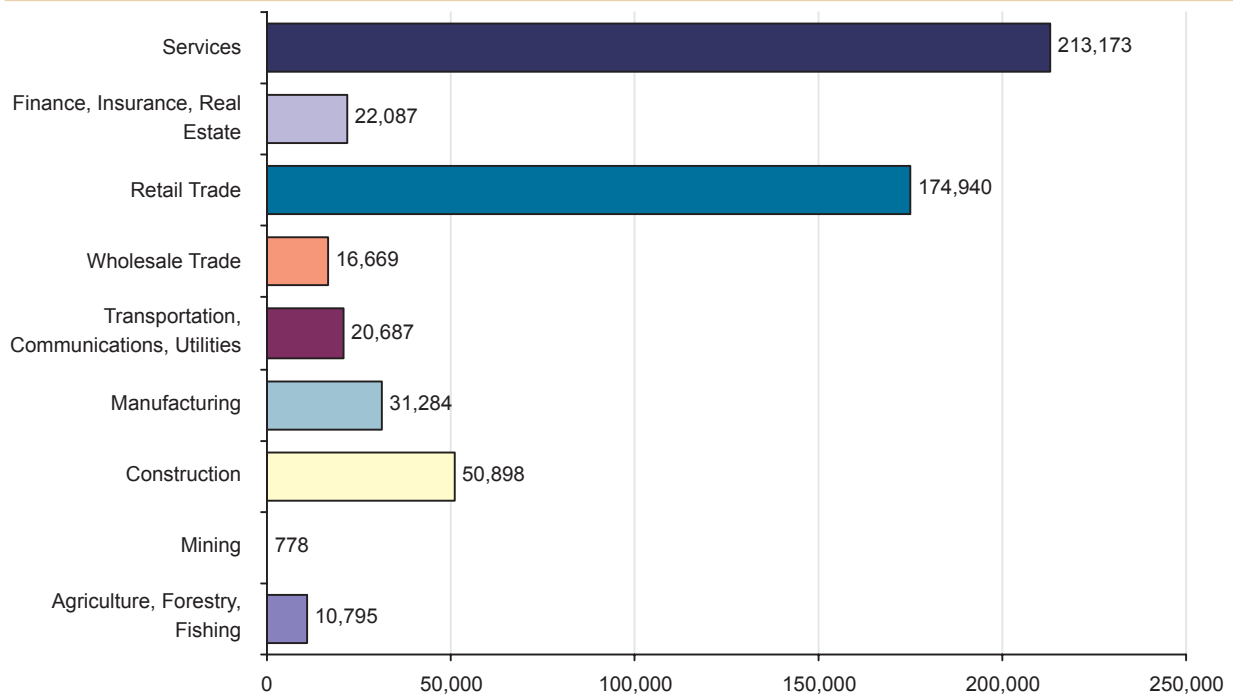
New Hires by Industry

WIA III

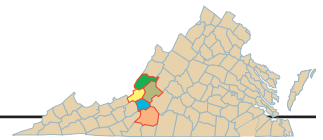


Total: 22,522

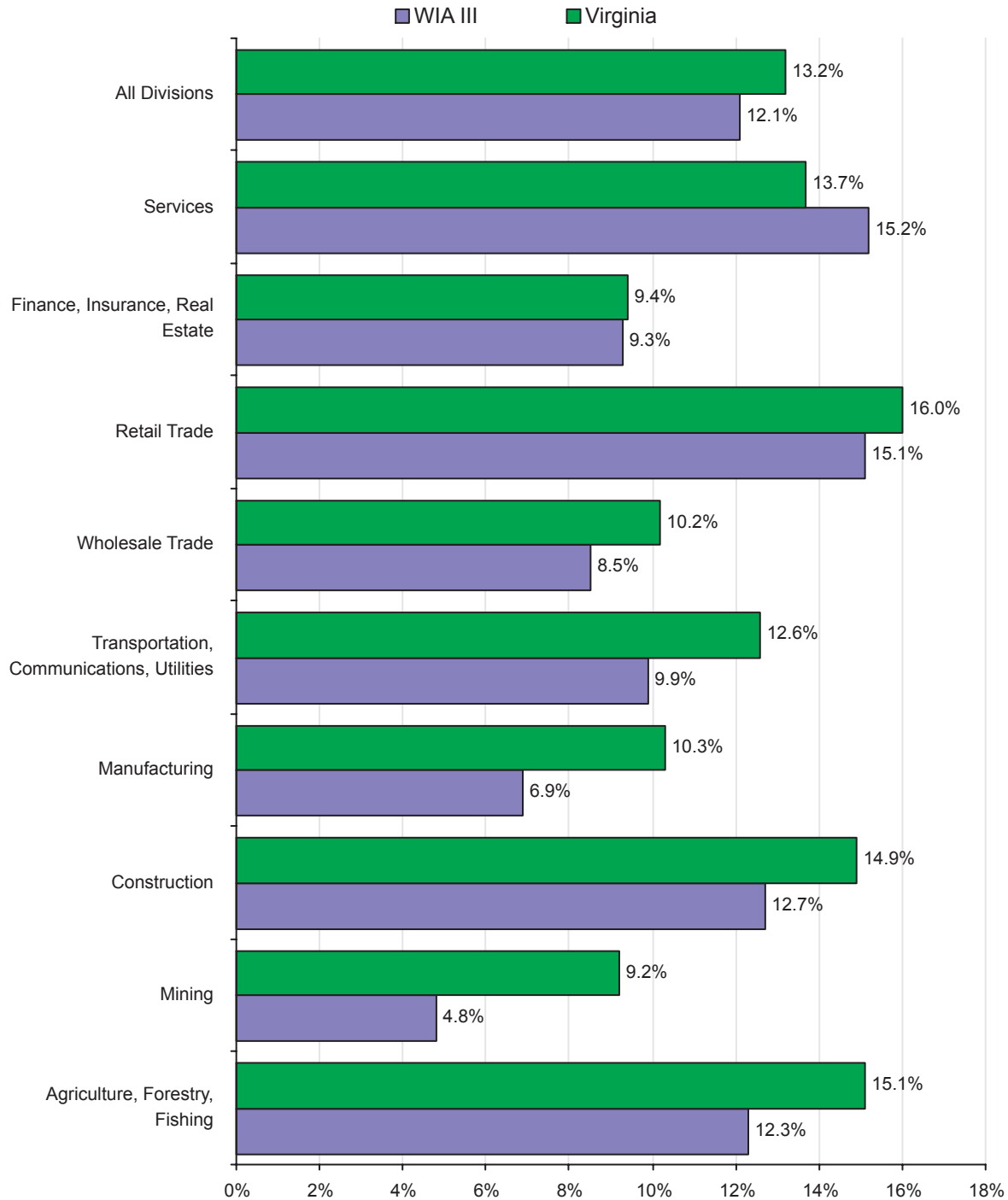
Virginia



Total: 541,323



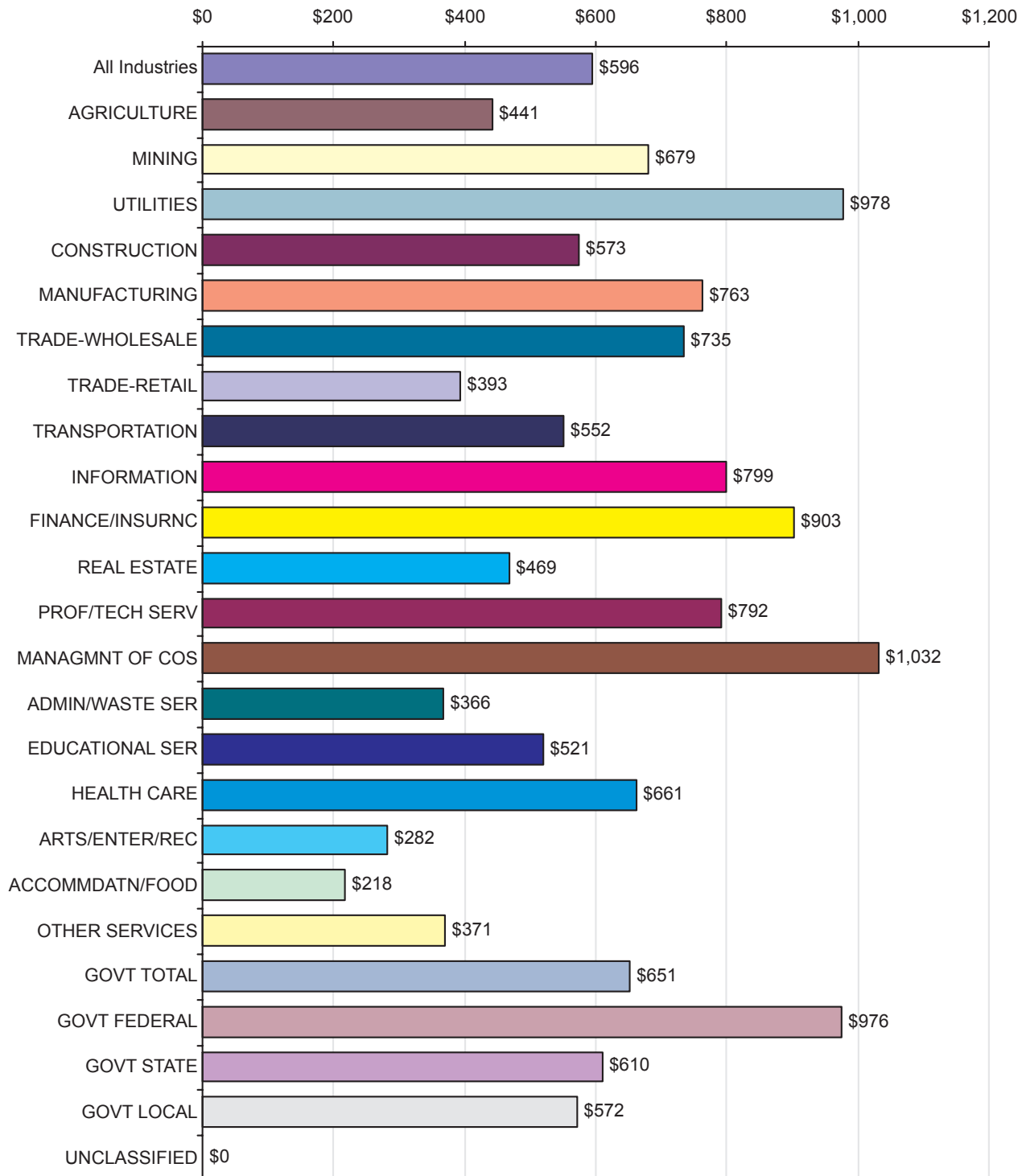
Turnover by Industry



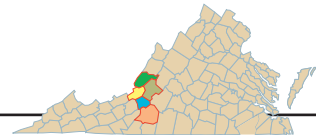
Source: U.S. Census Bureau, Local Employment Dynamics (LED) Program, 2002 annual averages.



Average Weekly Wage by Industry



Source: Covered Employment and Wages, annualized 2002.



Age of Workers by Industry

■ WIA III
 ■ Virginia

	14 - 18	19 - 21	22 - 24	25 - 34	35 - 44	45 - 54	55 - 66	65 - 99	14 - 99
Total Employment	5,426	8,080	8,720	32,384	37,390	32,260	16,463	4,891	145,614
	106,356	162,652	180,601	659,050	739,013	576,728	282,064	81,995	2,788,457
Agriculture, Forestry, and Fishing	68	108	105	252	279	171	59	42	1,083
	2,219	3,048	3,158	9,842	9,481	6,372	2,705	1,600	38,424
Mining	0	12	13	54	80	83	40	8	289
	22	221	366	1,702	2,803	3,498	1,129	136	9,876
Construction	162	496	623	2,403	3,021	2,358	1,105	325	10,490
	3,907	10,799	13,521	50,770	61,204	41,178	18,359	6,009	205,745
Manufacturing	86	446	847	4,909	7,086	6,487	3,729	515	24,105
	2,142	9,334	14,693	72,949	106,504	94,364	46,938	7,579	354,504
Transportation, Communications, and Utilities	79	297	459	2,144	2,433	2,057	862	179	8,512
	1,059	4,542	8,097	42,450	52,051	40,960	16,851	3,199	169,208
Wholesale Trade	95	260	403	2,186	2,948	2,504	1,197	363	9,955
	1,691	4,449	6,486	33,407	43,317	32,948	15,708	4,557	142,564
Retail Trade	3,671	3,922	2,961	7,097	6,804	5,586	2,987	1,271	34,299
	67,335	76,880	57,338	136,252	130,099	94,331	48,135	20,155	630,522
Finance, Insurance, and Real Estate	108	412	761	3,411	3,552	2,910	1,282	275	12,711
	1,775	7,281	13,158	53,760	56,683	42,503	20,070	5,079	200,308
Services	1,158	2,128	2,548	9,930	11,189	10,104	5,202	1,913	44,172
	26,206	46,097	63,782	257,918	276,866	220,571	112,170	33,682	1,037,291



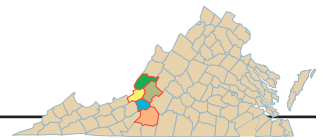
Total Employment by Industry

	Employment			Percent Change	
	Esti- mated 1998	Pro- jected 2008	Change	Total	Annual
Total All Industries	142,235	162,798	20,563	14.46%	1.36%
Agriculture, Forestry and Fishing, Total	1,944	2,055	111	5.71%	0.56%
Mining, Total	397	320	-77	-19.40%	-2.13%
Construction, Total	8,266	9,008	742	8.98%	0.86%
Manufacturing, Total	18,896	17,754	-1,142	-6.04%	-0.62%
Durable Goods Manufacturing, Total	11,353	10,966	-387	-3.41%	-0.35%
Nondurable Goods Manufacturing, Total	7,543	6,788	-755	-10.01%	-1.05%
Transportation and Public Utilities, Total	10,250	10,805	555	5.41%	0.53%
Transportation, Total	7,847	8,219	372	4.74%	0.46%
Communications and Utilities, Total	2,403	2,586	183	7.62%	0.74%
Wholesale and Retail Trade, Total	36,610	41,845	5,235	14.30%	1.35%
Wholesale Trade, Total	9,419	10,055	636	6.75%	0.66%
Retail Trade, Total	27,191	31,790	4,599	16.91%	1.57%
Finance, Insurance, and Real Estate, Total	9,544	10,675	1,131	11.85%	1.13%
Services, Total	47,369	60,827	13,458	28.41%	2.53%
Federal Government (Except Post Office)	2,468	2,245	-223	-9.04%	-0.94%
State Government (Except Education and Hospitality)	1,690	1,871	181	10.71%	1.02%
Local Government (Except Education and Hospitality)	4,801	5,393	592	12.33%	1.17%

Employment by Major Occupation Group

	Employment			Openings		
	Estimated 1998	Projected 2008	% Change	Replacements	Growth	Total
Total, All Occupations	142,214	162,792	14.47%	33,800	20,578	54,480
Executive, Administrative and Managerial Occupations	9,429	10,778	14.31%	1,680	1,349	3,040
Professional Specialty Occupations	26,563	32,758	23.32%	5,110	6,195	11,320
Marketing and Sales Occupations	18,308	21,407	16.93%	5,510	3,099	8,610
Administrative Support Occupations, Clerical	26,054	28,946	11.10%	5,420	2,892	8,290
Service Occupations	20,817	24,784	19.06%	6,560	3,967	10,550
Agriculture, Forestry, and Fishing Occupations	2,221	2,385	7.38%	590	164	770
Precision Production, Craft and Repair Occupations	15,169	16,171	6.61%	3,550	1,002	4,580
Operators, Fabricators, and Laborers	23,653	25,563	8.08%	5,380	1,910	7,320

Source: Industry and Occupational Employment Projections, 1998 — 2008.
Projection data is for the Roanoke MSA.



Growth Occupations

	Employment			Openings			Wages
	Estimated 1998	Projected 2008	% Change	Replacements	Growth	Total	Median Annual Wage
Computer Engineers	273	546	100.00%	20	273	290	\$66,930
Computer Support Specialists	390	765	96.15%	20	375	400	\$33,057
Systems Analysts	560	1,067	90.54%	30	507	540	\$56,747
Medical Assistants	356	565	58.71%	90	209	300	\$20,975
Telemarketers Door-to-Door Sales	832	1,308	57.21%	210	476	690	\$29,324
Securities/Commodities/Financial Svcs, Sales	265	395	49.06%	20	130	150	\$60,834
Home Health Aides	435	647	48.74%	60	212	270	\$16,513
Social/Human Service Assistants	304	432	42.11%	80	128	210	\$21,950
Adjustment Clerks	914	1,287	40.81%	60	373	430	\$21,906
Sales Agents, Business	324	455	40.43%	70	131	200	\$41,764
Hand Packers & Packagers	1,336	1,830	36.98%	330	494	820	\$17,818
Computer Programmers	489	663	35.58%	150	174	320	\$51,698
Social Workers, Med & Psych	286	387	35.31%	40	101	140	\$30,804
Correctional Officers	313	423	35.14%	90	110	200	\$27,669
Child Care Workers	344	464	34.88%	30	120	150	\$15,654
Physicians	666	894	34.23%	100	228	330	\$106,760
Teachers Aides, Paraprofessional	435	580	33.33%	50	145	200	\$19,690
Order Fillers, Wholesale/Retail	320	426	33.13%	80	106	190	\$18,664
Social Workers, Ex Med, Psych	381	501	31.50%	50	120	170	\$21,950
Guards	1,997	1,567	30.91%	300	370	670	\$18,933

Declining Occupations

	Employment			Openings		
	Estimated 1998	Projected 2008	% Change	Replacements	Growth	Total
Railroad Brake, Signal & Switch Oprs	120	60	-50.00%	40	-60	40
Sewing Machine Oprs, Garment	723	482	-33.33%	100	-241	100
Transportation Attendants	110	78	-29.09%	20	-32	20
Textile Machine Oprs/Tndrs	252	179	-28.97%	40	-73	40
Rail-Track Laying & Maint Equip Oprs	126	96	-23.81%	30	-30	30
Inspectors, Testers, Graders, Precision	157	127	-19.11%	30	-30	30
Computer Operators, Ex Peripheral	306	251	-17.97%	40	-55	40
Typists, Incl Word Processing	330	283	-14.24%	60	-47	60
Farm Equipment Operators	265	232	-12.45%	80	-33	80
Production Inspectors, Graders	470	416	-11.49%	110	-54	110

Source: Industry and Occupational Employment Projections, 1998 — 2008. 2002 OES Wage Survey data.
Projection data is for the Roanoke MSA. Wages are for WIA III.

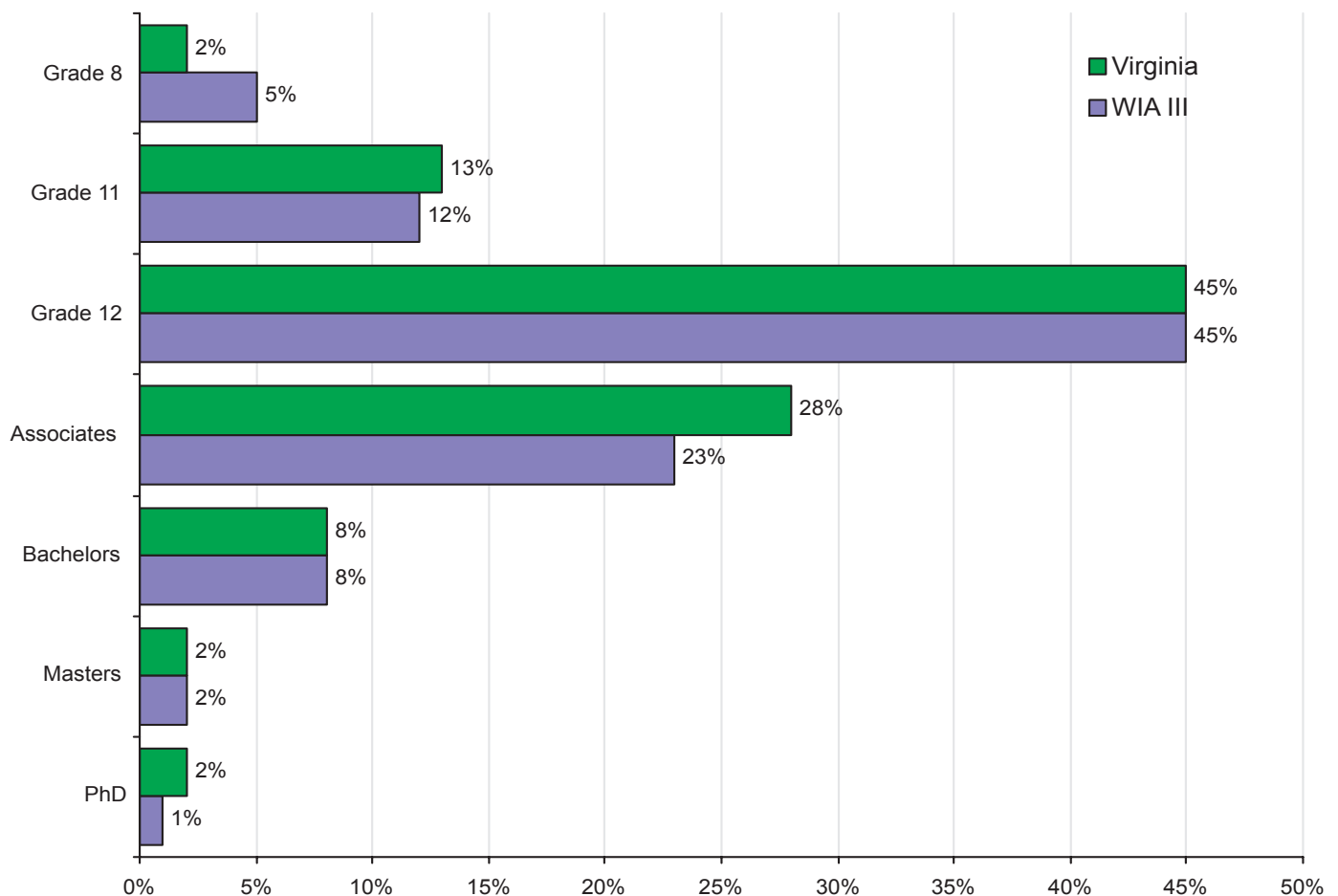


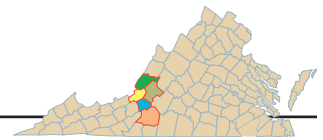
Characteristics of the Unemployed

Marketing the local labor force to new or expanding companies requires information about potential employees that would be available for immediate hire. Monthly data, collected as unemployed individuals apply for unemployment insurance benefits, provide information on various characteristics of the unemployed claimants. Demographic characteristics are recorded for age, race, sex, and education level. In addition, the industry of last employment and the occupation held in the most recent job is also part of the information collected when applicants register for unemployment insurance benefits.

As seen in the chart below, 45% of the unemployed claimants in Western Virginia have a grade 12 education level, as compared to only 41% of claimants statewide. On the other hand, at the level of Bachelors degree and higher, Western Virginia has a smaller percentage of claimants relative to the state. While Western Virginia has 895 unemployed claimants with at least a Bachelors degree, some of the other regions of the state have a higher ratio of claimants with post-secondary education.

Unemployed Claimants by Education Level





Characteristics of the Unemployed

(continued)

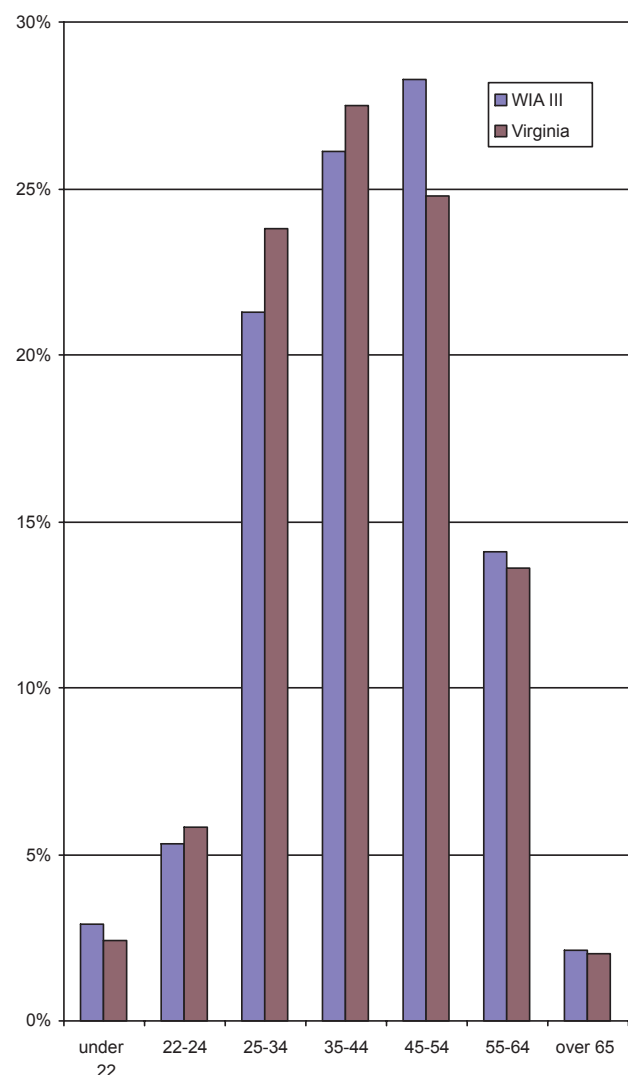
When choosing to relocate or expand, prospective employers are concerned with the availability of labor in key occupations needed to ensure smooth operation of the company. Information on unemployed claimants by occupation provides some evidence of labor availability. In combination with information on education and training programs that will add needed workers to the labor pool over time, this data offers employers a degree of comfort that they will be able to hire the workers they need.

Production workers comprise the largest category of unemployed beneficiaries in Western Virginia, accounting for almost 18% of total claimants in February 2004. Construction and Extraction and Office and Administrative Support workers also account for a significant share of the unemployed claimants, collectively representing over 30% of the total. Employers requiring workers in these occupation categories will find an abundant supply.

Claimants by Occupation

OCCUPATION	Number of Claimants
Management	544
Business and Financial Operations	168
Computer and Mathematical	202
Architecture and Engineering	86
Life, Physical, and Social Science	36
Community and Social Services	33
Legal	30
Education, Training, and Library	33
Arts, Design, Entertainment, Sports, and Media	29
Healthcare Practitioners and Technical	71
Healthcare Support	131
Protective Service	95
Food Preparation and Serving Related	243
Building and Grounds Cleaning and Maintenance	352
Personal Care and Service	75
Sales and Related	1,030
Office and Administrative Support	1,240
Farming, Fishing, and Forestry	13
Construction and Extraction	1,347
Installation, Maintenance, and Repair	388
Production	1,478
Transportation and Material Moving	776
Military Specific	18
SOC INA	8
TOTAL	8,426

Claimants by Age

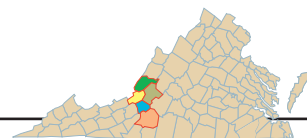




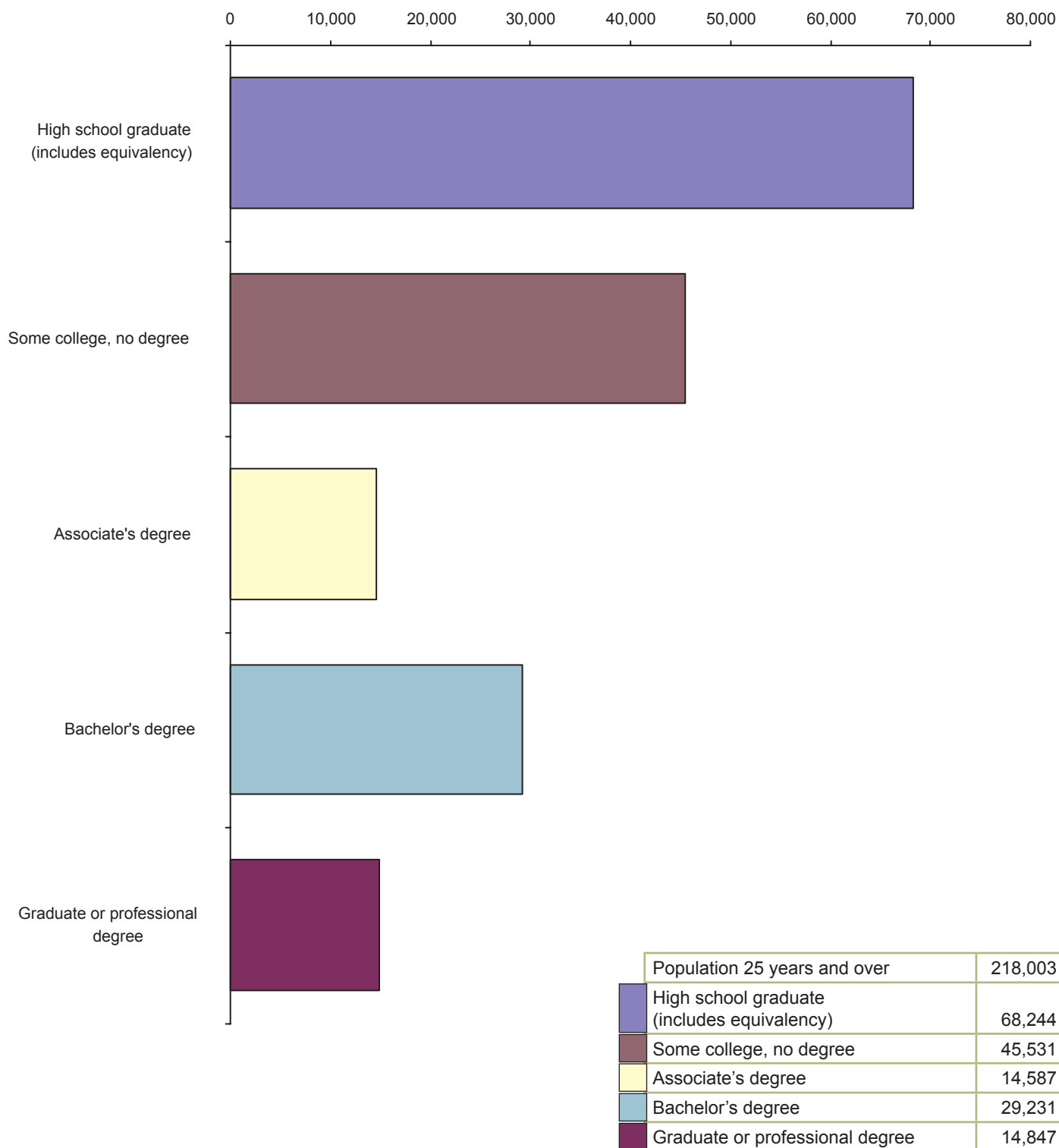
IV. Education Profile

Education data describe the human capital embodied in the current labor force and provide insight into the education and training that will be required to fill the ranks of the future labor force. Some key features of the WIA III's education and training environment are as follows:

- Educational attainment at the baccalaureate level and above is low relative to the state as a whole.
- An assessment of the occupation-driven demand for local training needs indicates that between 1998 and 2008 the greatest demand for graduates from:
 - *Post-secondary vocational programs* will be in Auto Mechanic/Technician and Licensed Practical Nursing.
 - *Associate's degree programs* will be in Registered Nursing.
 - *Baccalaureate degree programs* will be in Accounting; Computer and Information Sciences; and Elementary and General Education.
- An assessment of the occupation-driven demand for worker skills indicates that between 1998 and 2008 there will be a small increase in the skill levels required in *locating information* and *writing*.



Education Level





Occupation-Driven Training Projection

In this section we use Virginia Employment Commission's (VEC's) occupational employment projections for the Roanoke Metropolitan Statistical Area (MSA),¹ in combination with a crosswalk developed by the National Crosswalk Service Center (NCSC) to "map" occupations into their prerequisite education and training programs.² Often these are many-to-many relationships where one occupation maps into several alternative education and training programs, and one program serves as a conduit into multiple occupations. The analysis is then further refined by using a classification scheme developed by the Bureau of Labor Statistics (BLS) to "sort" occupations according to the minimum degree or award typically required for employment in that occupation.³ Through this combination of steps, we are able to use VEC's occupational employment projections to predict the occupation-driven demand for specific education and

training programs within the Roanoke MSA.⁴ The method used to accomplish this task is not new and has been successfully employed in earlier studies conducted in several states, including Virginia.⁵

The table that follows depicts the annual occupation-driven demand for training needs in the Roanoke MSA for the 1998 to 2008 period, as derived from this analysis. As these data show, the largest numbers of needed graduates are in auto repair (e.g., Auto/Automotive Mechanic / Technician), business (e.g., Accounting, Business Administration and Management, Finance), computer technology (Computer and Information Sciences, Information Sciences and Systems, Management Information Systems and Data Processing), education (e.g., Elementary Teacher Education, and General Education), and health (e.g., Medicine (MD), Registered Nurse, and Licensed Practical Nurse).

1 The Roanoke Metropolitan Statistical Area is comprised of Botetort and Roanoke counties, and the cities of Roanoke and Salem.

2 The National Crosswalk Service Center (NCSC) is funded by the U.S. Department of Labor, Employment and Training Administration. This crosswalk identifies the prerequisite instructional programs necessary for employment in 651 specific occupations.

3 The Bureau of Labor Statistics classifies occupations according to eleven education and training categories. Four of these involve on-the-job training or work experience only and the remaining seven require some level of postsecondary education (i.e., first-professional degree, doctoral degree, master's degree, bachelor's degree, associate's degree, or postsecondary vocational training). For purposes of this study, we restrict the analysis to occupations that fall within these seven education and training categories.

4 More formally, the demand for education and training programs is calculated as:

$$DCIP_i = \sum Dc_{ipji}$$

Where,

$$Dc_{ipji} = (SOC_j)(GCIPI_i / \sum Gc_{ipij})$$

and,

$DCIP_i$ = the annual demand for instructional program i

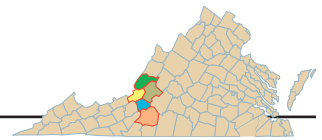
$\sum Dc_{ipji}$ = the annual demand for instructional program i across all occupation(s) j

SOC_j = the projected annual openings for occupation j

$GCIPI_i$ = Virginia graduates from instructional program i (for academic year 2000-01)

$\sum Gc_{ipij}$ = Virginia graduates from all instructional program(s) i (for academic year 2000-01) related to occupation j

5 Similar methods are used in at least seven states (California, Georgia, Idaho, Illinois, New Jersey, Utah, and Virginia) to project anticipated education and training demands. For an excellent exposition of this method see, William J. Drummond and Jan L. Youtie, "Occupational Employment, Demand for College Graduates, and Migration: A Statewide View," a report to the Board of Regents, University System of Georgia, 1999. For an example of how this method has been used previously in Virginia see, A. Fletcher Mangum, "System-Wide Needs Assessment for Virginia Education," State Council of Higher Education for Virginia, March 28, 2002, p.90.



Annual Occupation-Driven Training Needs in the Roanoke MSA, 1998 – 2008

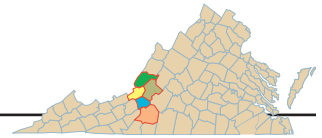
Program	First Professional	Doctoral Degree	Master's Degree	Work Experience plus degree	Bachelor's Degree	Associate's Degree	Postsecondary Vocational Training	Total
Accounting					28			28
Administrative Assistant / Secretarial Science, General							9	9
Aerospace, Aeronautical and Astronautical Engineering					1			1
Agricultural Teacher Education (Vocational)					1			1
Architecture					2			2
Art Teacher Education					2			2
Art, General				1				1
Auto / Automotive Mechanic / Technician							39	39
Automotive Engineering Tech / Technician							2	2
Barber/Hairstylist							3	3
Bilingual/Bicultural Education					1			1
Biology, General		1						1
Business Administration and Management, General				166	4			170
Business Computer Programming / Programmer					4			4
Business Marketing and Marketing Management				2				2
Business Systems Analysis and Design					1			1
Business Systems Networking and Telecommunications					1	9		10
Business Teacher Education (Vocational)					1			1
Cardiovascular Tech / Technician						3		3
Chemical Engineering					1			1
Chemistry, General					1			1
Child Care and Guidance Workers and Managers, General					14			14
Child Care Provider / Assistant					6			6
Child Care Services Manager					2			2
Chiropractic (DC, DCM)	1							1



Program	First Professional	Doctoral Degree	Master's Degree	Work Experience plus degree	Bachelor's Degree	Associate's Degree	Postsecondary Vocational Training	Total
City/Urban, Community and Regional Planning			4					4
Civil Engineering, General					6			6
Communication Disorders, General			2					2
Communication Systems Installer and Repairer							5	5
Communications Technol. / Technicians, Other							1	1
Computer and Information Sciences, General					34			34
Computer and Information Sciences, Other					2			2
Computer Engineering					8			8
Computer Engineering Tech / Technician						2		2
Computer Installer and Repairer							1	1
Computer Maintenance Tech/Technician							3	3
Computer Programming					8			8
Computer Science					1			1
Computer System Analysis					2			2
Computer Teacher Education					1			1
Cosmetic Services, General							1	1
Cosmetologist							13	13
Counselor Education Counseling and Guidance Services			6					6
Data Processing Tech / Technician					1			1
Dental Hygienist						8		8
Dentistry (DDS, DMD)	4							4
Design and Applied Arts, Other					1			1
Design and Visual Communications					3			3
Dietetics / Human Nutritional Services					1			1
Economics, General					2			2
Education Administration and Supervision, General				3				3
Education, General				6	49			55
Electrical and Electronic Engineering – Related Tech / Technician						2		2

Education Profile

WIA III



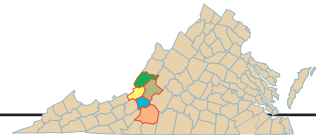
Program	First Professional	Doctoral Degree	Master's Degree	Work Experience plus degree	Bachelor's Degree	Associate's Degree	Postsecondary Vocational Training	Total
Electrical and Electronics Equipment Installer and Repairer							1	1
Electrical, Electronic and Communications Engineering Tech / Technician						3		3
Electrical, Electronics and Communication Engineering					14			14
Elementary Teacher Education					25			25
Elementary, Middle and Secondary Education Administration				1				1
Emergency Medical Tech / Technician							5	5
Engineering / Industrial Management				16				16
Funeral Services and Mortuary Science						2		2
General Buying Operations					1			1
General Retailing Operations					2			2
Geology					1			1
Graphic Design, Commercial Art and Illustration				2				2
Health and Physical Education, General					2			2
Health Teacher Education					2			2
Human Resources Management				4	17			21
Human Resources Management, Other					2			2
Industrial Design					1			1
Industrial/Manufacturing Engineering					1			1
Information Sciences and Systems					23	12		35
Insurance and Risk Management					4			4
Insurance Marketing Operations					15			15
Interior Design					1			1
International Business				5				5
Investments and Securities				1	10			11
Junior High / Intermediate / Middle School Teacher Education					2			2
Juridical Science / Legal Specialization (LLM, MCL, JSD)	1							1
Labor/Personnel Relations and Studies				1	2			3
Law (LLB, JD)	12							12



Program	First Professional	Doctoral Degree	Master's Degree	Work Experience plus degree	Bachelor's Degree	Associate's Degree	Postsecondary Vocational Training	Total
Law and Legal Studies, Other	1							1
Library Science / Librarianship			5					5
Make-Up Artist							1	1
Management Information Systems and Business Data Processing					15	19		34
Management Science			1					1
Mathematics Teacher Education					3			3
Mechanical Engineering					6			6
Medical Administrative Assistant / Secretary							2	2
Medical Office Management							1	1
Medical Records Tech / Technician						6		6
Medical Transcription							4	4
Medicine (MD)	28							28
Music Teacher Education					5			5
Nursing (R.N. Training)						72		72
Nursing Anesthetics (Post-R.N.)						1		1
Nursing Science (Post-R.N.)						3		3
Nursing, Family Practice (Post-R.N.)						1		1
Nursing, Other						11		11
Occupational Therapy					4			4
Occupational Therapy Assistant						3		3
Optometry (O.D.)	1							1
Organizational Behavior Studies					4			4
Osteopathic Medicine (D.O.)	4							4
Paralegal/Legal Assistant						9		9
Parks, Recreation and Leisure Facilities Management					1			1
Parks, Recreation and Leisure Studies					1			1
Pharmacy (B. Pharm., Pharm D.)	6							6
Photography							1	1
Physical Education Teaching and Coaching					10			10
Physical Therapy			8					8

Education Profile

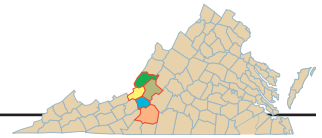
WIA III



Program	First Professional	Doctoral Degree	Master's Degree	Work Experience plus degree	Bachelor's Degree	Associate's Degree	Postsecondary Vocational Training	Total
Physical Therapy Assistant						9		9
Physician Assistant					6			6
Practical Nurse (LPN Training)							41	41
Psychiatric / Mental Health Services Technician							2	2
Psychology, General			2					2
Public Administration				11				11
Public Relations and Organizational Communications					3			3
Purchasing, Procurement and Contracts Management					11			11
Reading Teacher Education					6			6
Real Estate					5		3	8
Respiratory Therapy Technician						6		6
School Psychology			1					1
Science Teacher Education, General					1			1
Secondary Teacher Education					7			7
Social Science Teacher Education					1			1
Social Studies Teacher Education					2			2
Special Education, General					4			4
Speech-Language Pathology			1					1
Speech-Language Pathology and Audiology			4					4
Sport and Fitness Administration/Management					1			1
Surgical / Operating Room Technician							3	3
Surveying					1			1
Taxation					2			2
Teacher Education, Specific Academic and Vocational Programs					3			3
Technical Teacher Education (Vocational)					1			1
Technology Teacher Education / Industrial Arts Teacher Ed					1			1
Trade and Industrial Teacher Education (Vocational)					1			1
Travel Services Marketing Operations							3	3



Program	First Professional	Doctoral Degree	Master's Degree	Work Experience plus degree	Bachelor's Degree	Associate's Degree	Postsecondary Vocational Training	Total
Veterinarian Assistant / Animal Health Technician						2		2
Veterinary Medicine (DVM)	3							3
Totals	61	1	34	243	449	183	145	1116



Work Skills Projection

In this section we use the VEC's occupational employment projections for the Roanoke MSA, in combination with occupational skills profiles developed by ACT,¹ to identify the skill sets that will be required to fill projected annual job openings within the region. The skills categories addressed in this analysis are Applied Mathematics, Applied Technology, Listening, Locating Information, Observation, Reading for Information, Teamwork, and Writing. A description of each category, the skills levels associated with it, and the proportion of projected annual job openings that fall within each skill level follow.

Applied Mathematics

The *Applied Mathematics* assessment measures a person's skill in using mathematical reasoning to solve work-related problems. ACT defines the skills levels associated with this category as follows.

Level 3:

- Perform basic mathematical operations using whole numbers and decimals.
- Convert a number from one form into another using whole numbers, fractions, decimals, or percentages.
- Solve problems that are straightforward, involving a single type of mathematical operation.
- Translate easily from a verbal setup to a mathematical equation when all the information needed to solve the problem is provided in logical order and no unrelated information is included.

Level 4 (in addition to requirements for previous levels):

- Perform one or two mathematical operations using several positive or negative numbers.
- Add commonly known fractions, decimals, or percentages, or add three fractions that share a common denominator.
- Calculate averages, simple ratios, proportions, and rates, using whole numbers and decimals.

- Reorder verbal information before performing calculations.
- Determine which operations to perform and in what order.
- Read a simple chart or graph to obtain the information needed to solve a problem.

Level 5 (in addition to requirements for previous levels):

- Look up and calculate single-step conversions within English or non-English systems of measurement or between systems of measurement.
- Calculate using mixed units and several steps of logic.
- Calculate perimeters and areas of basic shapes.
- Calculate percentage discounts and markups.
- Determine what information, calculations, and unit conversions are needed to find a solution.

Level 6 (in addition to requirements for previous levels):

- Calculate using negative numbers, fractions, ratios, percentages, and mixed numbers.
- Calculate multiple rates for comparison or use in other calculations.
- Find basic areas and volumes of rectangular solids.
- Identify and correct errors in calculations.
- Solve problems involving considerable setup and multiple-step calculations or conversions.

Level 7 (in addition to requirements for previous levels):

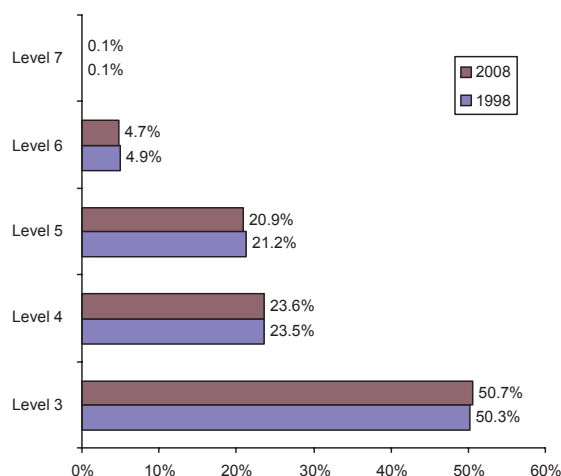
- Calculate using multiple steps of logic.
- Calculate multiple areas and the volumes of spheres, cylinders, and cones.
- Solve problems with more than one unknown.
- Solve problems involving nonlinear functions, such as rates of change.

¹ The occupational skills profiles used in this analysis were provided by ACT. ACT is an independent, non-profit organization that specializes in research and assessment related to education and work. These profiles are based on actual ACT *WorkKeys* assessments of thousands of employed individuals nationally. They represent the most comprehensive and current measure of the work skills required for specific occupations.

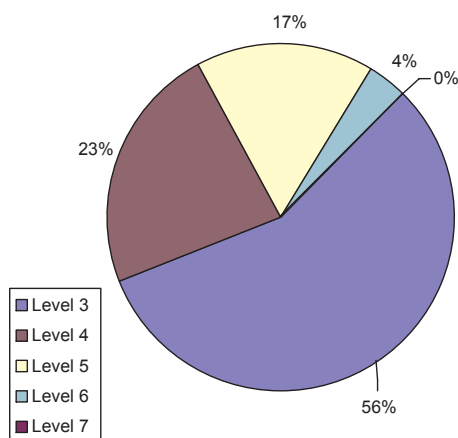


- Calculate by applying basic statistical concepts.
- Derive information needed to solve problems if incomplete or implicit information is presented.

The following figure details the percentage of overall jobs in the Roanoke MSA in 1998 and 2008 by required *Applied Mathematics* skills level, as determined by the ACT occupation skills profiles. The second figure provides a similar breakdown for projected annual job openings between 1998 and 2008. These data show that the majority of jobs will require workers with Level 3 *Applied Mathematics* skills.



Proportion of Jobs in the Roanoke MSA by Required Skill Level – *Applied Mathematics*



Annual Openings in the Roanoke MSA by Required Skill Level – *Applied Mathematics*

Applied Technology

The *Applied Technology* assessment measures a person's skill in using the basic principles of mechanics, electricity, fluid dynamics, and thermodynamics to solve problems with machines, equipment, and structures found in the workplace. ACT defines the skills levels associated with this category as follows.

Level 3:

- Understand the operation of basic hand tools, simple machine components, and uncomplicated systems, such as piping systems, simple electrical heaters, or other equipment found in the home, school, or workplace.
- Apply elementary principles underlying the operation of physical systems, such as the workings of plumbing components or simple electrical systems.

Level 4 (in addition to requirements for previous levels):

- Understand the operation of moderately complex tools, machines, and systems, such as appliances, pulley-driven equipment, or piping systems that carry more than one fluid.
- Apply elementary principles underlying the operation of physical systems, such as a block and tackle or cooling fins.

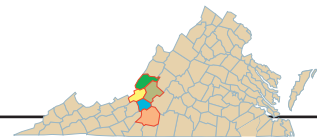
Level 5 (in addition to requirements for previous levels):

- Use the basic principles of mechanics, electricity, thermodynamics, and fluid dynamics in moderate and advanced applications.
- Understand complex machines and systems, such as the operation of gasoline engines, complex appliances, or an electrical system in a building.

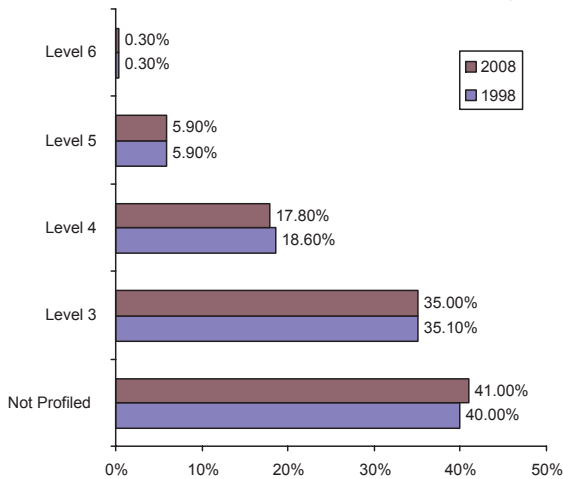
Level 6 (in addition to requirements for previous levels):

- Use principles of mechanics, electricity, thermodynamics, and fluid dynamics interacting in advanced applications such as air conditioning units.
- Troubleshoot complex systems in which a variety of mechanical, electrical, thermal, or flow faults are potential sources of difficult problems.

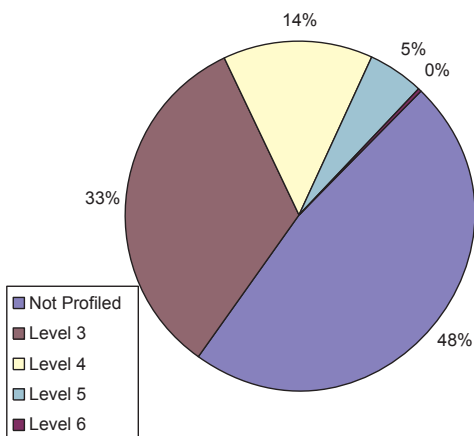
The following figure details the percentage of overall



jobs in the Roanoke MSA in 1998 and 2008 by required *Applied Technology* skills level, as determined by the ACT occupation skills profiles. The second figure provides a similar breakdown for projected annual job openings between 1998 and 2008. These data show that the majority of jobs will require workers with Level 3 *Applied Technology* skills. The large “Not Profiled” proportion indicates that ACT has not profiled many of these occupations with respect to *Applied Technology* skills. As a result, it is not possible to include them in the analysis.



Proportion of Jobs in the Roanoke MSA by Required Skill Level – Applied Technology



Annual Openings in the Roanoke MSA by Required Skill Level – Applied Technology

Listening

The *Listening* portion of the *Listening* and *Writing* assessment measures a person’s skill in listening to and conveying information. ACT defines the skills levels associated with this category as follows.

Level 1:

- Write down a small amount of useful information based on a spoken communication.
- Give clues to the gist of the situation or provide sources of further information, but do not include enough information to give the receiver a correct understanding of the situation described in the message.

Level 2 (in addition to requirements for previous levels):

- Correctly write down the basic ideas of a spoken message.
- Give a fair amount of useful information, but may miss some of the important details or incorrectly record some of the information.

Level 3 (in addition to requirements for previous levels):

- Listen to a spoken communication and record messages that are basically correct.
- Present all the primary details and the relationships among them correctly, but may miss one or two pieces of important information.

Level 4 (in addition to requirements for previous levels):

- Accurately convey the central idea of a spoken communication.
- Correctly record all the important information and the relationships among pieces of information, but may miss or incorrectly record some details or include irrelevant information.

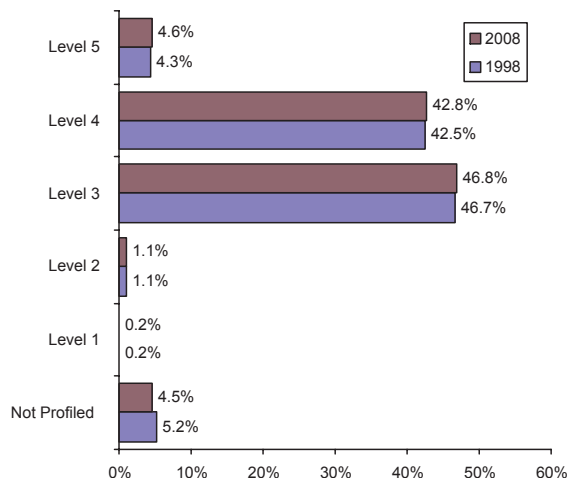
Level 5 (in addition to requirements for previous levels):

- Correctly record all the important information and the relationships among pieces of information from a spoken communication.
- Use supporting details to convey insight into the particular situation the message involves.

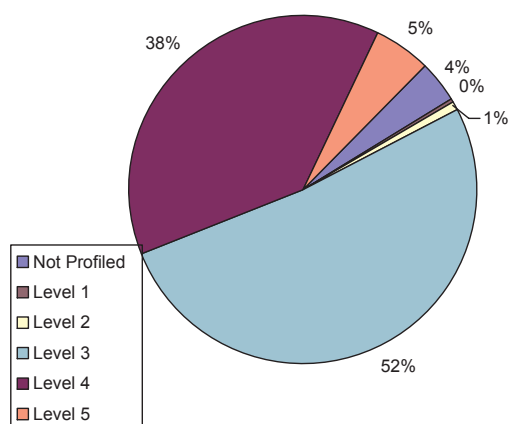
The following figure details the percentage of overall jobs in the Roanoke MSA in 1998 and 2008 by required *Listening* skills level, as determined by the ACT occupation skills profiles. The second figure provides a similar



breakdown for projected annual job openings between 1998 and 2008. These data show that the majority of jobs will require workers with Level 3 and Level 4 *Listening* skills.



Proportion of Jobs in the Roanoke MSA by Required Skill Level – Listening



Annual Openings in the Roanoke MSA by Required Skill Level – Listening

Locating Information

The *Locating Information* assessment measures a person's skill in using workplace graphics such as diagrams, floor plans, tables, charts, graphs, forms, and instrument gauges. ACT defines the skills levels associated with this category as follows.

Level 3:

- Find one or two pieces of information in a graphic.

- Fill in one or two pieces of information that are missing from a graphic.

Level 4 (in addition to requirements for previous levels):

- Find several pieces of information in graphics.
- Summarize and/or compare information and trends in a single graphic.
- Summarize and/or compare information and trends among more than one graphic by determining the relationships among the graphics.

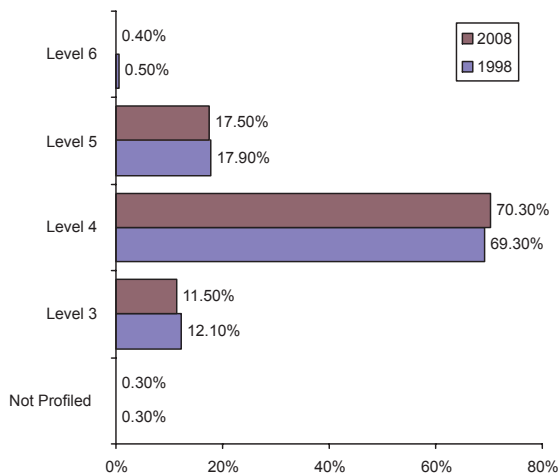
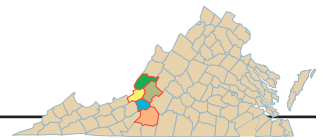
Level 5 (in addition to requirements for previous levels):

- Summarize and/or compare information and trends in a single graphic.
- Sort through distracting information to summarize and/or compare information and trends presented in more than one workplace graphic.

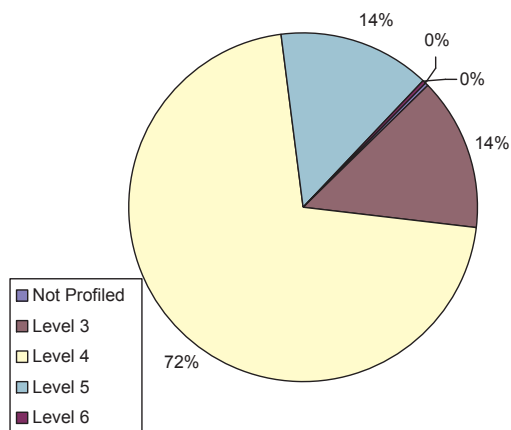
Level 6 (in addition to requirements for previous levels):

- Draw conclusions from the information presented in very detailed graphics.
- Apply information from these types of graphics to specific situations.
- Analyze data within these types of graphics to make decisions and/or predictions requiring judgments based on the information presented.

The following figure details the percentage of overall jobs in the Roanoke MSA in 1998 and 2008 by required *Locating Information* skills level, as determined by the ACT occupation skills profiles. The second figure provides a similar breakdown for projected annual job openings between 1998 and 2008. These data show that the majority of jobs will require workers with Level 4 *Locating Information* skills.



Proportion of Jobs in the Roanoke MSA by Required Skill Level – Locating Information



Annual Openings in the Roanoke MSA by Required Skill Level – Locating Information

Observation

The *Observation* assessment measures a person's skill at noticing details and paying attention to instructions and demonstrations. The following is a description of the skills levels associated with this area.

Level 3:

- Pay attention.
- Watch and listen to a strongly cued demonstration or set of instructions.
- Recall a few strongly reinforced details of a process or procedure.

Level 4:

- Sustain focused attention on the demonstrated instructions, process, or procedures.
- Select and attend to important details.
- Recall a few important, moderately reinforced details about the demonstrated process or procedure.

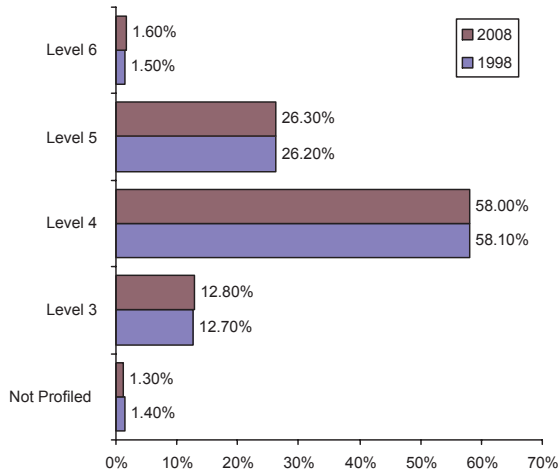
Level 5:

- Focus attention on and recall several important aspects of the information presented.
- Ignore irrelevant background information through selective attention to important details.
- Maintain attention to detail.
- Recall several important details about unfamiliar material.

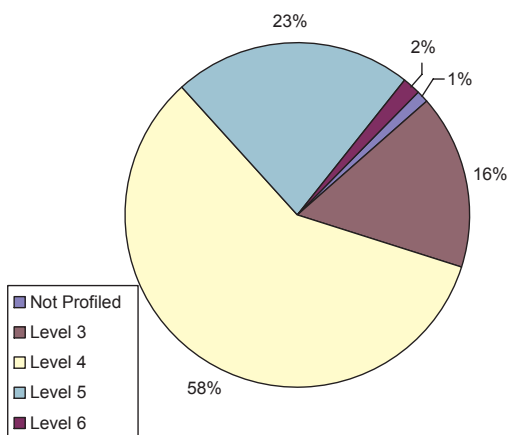
Level 6:

- Notice and remember several details that are relevant to the process or procedure being shown.
- Take in and recall incoming sensory information so it can be used to make predictions, comparisons, or evaluations.
- Visualize how a detail or task fits into the entire process or procedure demonstrated.
- Interpret if-then and cause-effect relationships.

The following figure details the percentage of overall jobs in the Roanoke MSA in 1998 and 2008 by required *Observation* skills level, as determined by the ACT occupation skills profiles. The second figure provides a similar breakdown for projected annual job openings between 1998 and 2008. These data show that the majority of jobs will require workers with Level 4 *Observation* skills.



Proportion of Jobs in the Roanoke MSA by Required Skill Level – Observation



Annual Openings in the Roanoke MSA by Required Skill Level – Observation

Reading for Information

The *Reading for Information* assessment measures a person's skill in reading and using work-related information including instructions, policies, memos, bulletins, notices, letters, manuals, and governmental regulations. ACT defines the skills levels associated with this category as follows.

Level 3:

- Identify uncomplicated key concepts and simple details.
- Recognize the proper placement of a step in a sequence of events, or the proper time to perform a task.

- Identify the meaning of a word that is defined within the document.
- Identify the meaning of a simple word that is not defined within the document.
- Recognize the application of instructions given in the document to situations that are also described in the document.

Level 4:

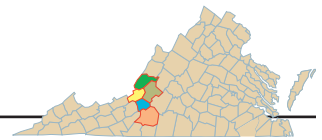
- Identify important details that are less obvious than those in Level 3.
- Recognize the application of more complex instructions, some of which involve several steps, to described situations.
- Recognize cause-effect relationships.
- Determine the meaning of words that are not defined in the document.

Level 5:

- Identify the paraphrased definition of a technical term or jargon that is defined in the document.
- Recognize the application of technical terms or jargon to stated situations.
- Recognize the definition of an acronym that is defined in the document.
- Identify the appropriate definition of a word with multiple meanings.
- Recognize the application of instructions from the document to new situations that are similar to those described in the document.
- Recognize the application of more complex instructions to described situations, including conditionals and procedures with multiple steps.

Level 6:

- Recognize the application of jargon or technical terms to new situations.
- Recognize the application of complex instructions to new situations.
- Recognize, from context, the less common meaning of a word with multiple meanings.
- Generalize from the document situations not described in the document.

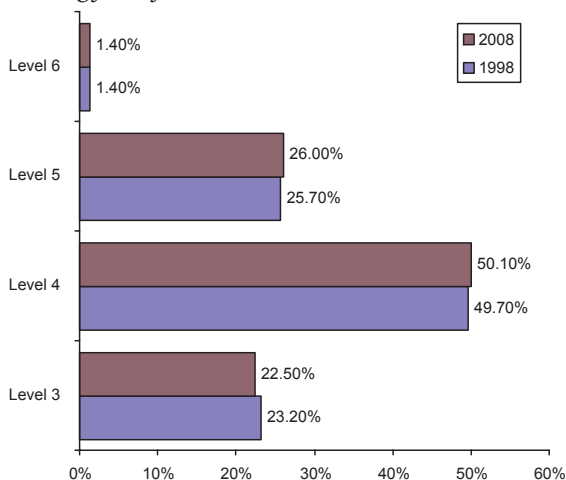


- Identify implied details.
- Explain the rationale behind a procedure, policy, or communication.
- Generalize from the document to a somewhat similar situation.

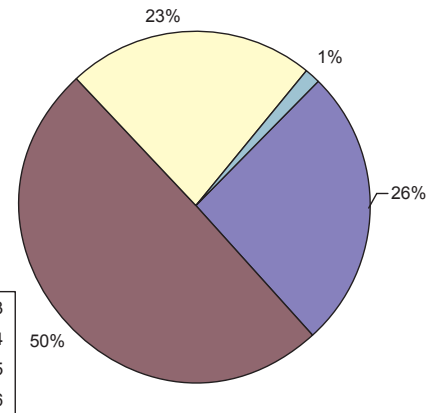
Level 7:

- Recognize the definitions of difficult, uncommon jargon or technical terms, based on the context of the reading materials.
- Figure out the general principles underlying described situations and apply them to situations neither described in nor completely similar to those in the document.

The following figure details the percentage of overall jobs in the Roanoke MSA in 1998 and 2008 by required *Reading for Information* skills level, as determined by the ACT occupation skills profiles. The second figure provides a similar breakdown for projected annual job openings between 1998 and 2008. These data show that the majority of jobs will require workers with Level 4 *Reading for Information* skills.



Proportion of Jobs in the Roanoke MSA by Required Skill Level – Reading for Information



Annual Openings in the Roanoke MSA by Required Skill Level – Reading for Information

Teamwork

The *Teamwork* assessment measures a person's skill in choosing behaviors and/or actions that simultaneously support relationships within a team and lead toward the accomplishment of work tasks. The following is a description of the skills levels associated with this area.

Level 3:

- Identify team goals and ways to work with other team members to accomplish team goals.
- Recognize that a team is having problems finishing a task and identify the cause of those problems.
- Choose actions that actively support the ideas other team members have for accomplishing team goals.
- Recognize the need for trust and dependability in a team environment.

Level 4:

- Identify the organization of tasks and the time schedule that would help the team reach goals efficiently, creatively, and effectively.
- Select approaches that accept direction from other team members in order to complete tasks and to build and keep up good team relations.
- Identify behaviors that show appreciation for the personal and professional qualities of other team members and respect for their diversity.
- Recognize the need for commitment to quality and sensitivity to customers while pursuing the team goal.



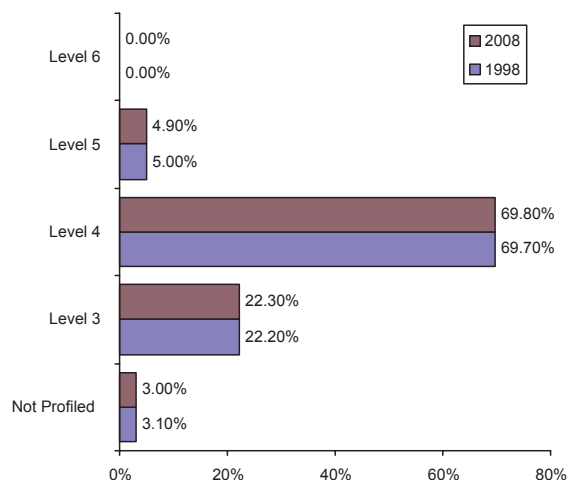
Level 5:

- Identify courses of action that give direction to other team members.
- Determine the best use of team talents to accomplish goals.
- Choose approaches that encourage other team members to improve relationships and/or complete tasks.
- Consider and evaluate the possible effects of alternative behaviors on both team relationships and the completion of tasks.

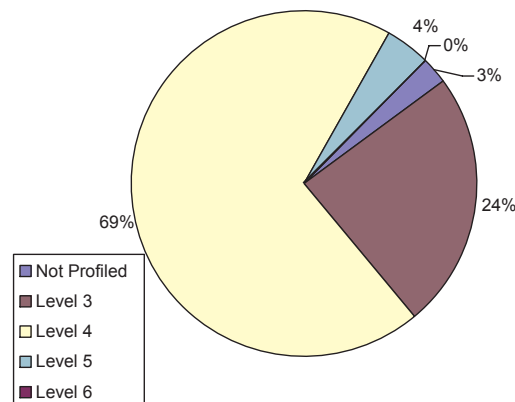
Level 6:

- Identify the focus of team activity and select a new focus if that would help the team meet its goals more effectively.
- Select approaches that show a willingness to give and take direction, as needed, to further team goals (e.g., recognize the organization of team members' tasks that would best serve the larger goals of the team).
- Choose approaches that encourage a team to act as a unit and reach agreement when discussing specific issues.
- Identify actions that would help manage differences of opinion between team members, moving the team toward its goals while valuing and supporting individual diversity.

The following figure details the percentage of overall jobs in the Roanoke MSA in 1998 and 2008 by required *Teamwork* skills level, as determined by the ACT occupation skills profiles. The second figure provides a similar breakdown for projected annual job openings between 1998 and 2008. These data show that the majority of jobs will require workers with Level 4 *Teamwork* skills.



Proportion of Jobs In the Roanoke MSA by Required Skill Level – Teamwork



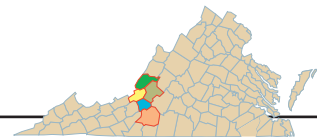
Annual Openings in the Roanoke MSA by Required Skill Level – Teamwork

Writing

The *Writing* portion of the *Listening and Writing* assessment measures a person's skill in writing work-related messages. ACT defines the skills levels associated with this category as follows.

Level 1:

- Write messages in English that contain a large number of major grammatical, punctuation, spelling, and/or other mechanical errors making the messages very unclear and inconsistent with standard business English.



Level 2:

- Write messages that are generally understandable, but contain many errors in grammar, punctuation, and/or sentence structure making these messages somewhat difficult to comprehend.

Level 3:

- Write messages that are clear, but may include some incomplete sentences and/or errors in grammar and punctuation.

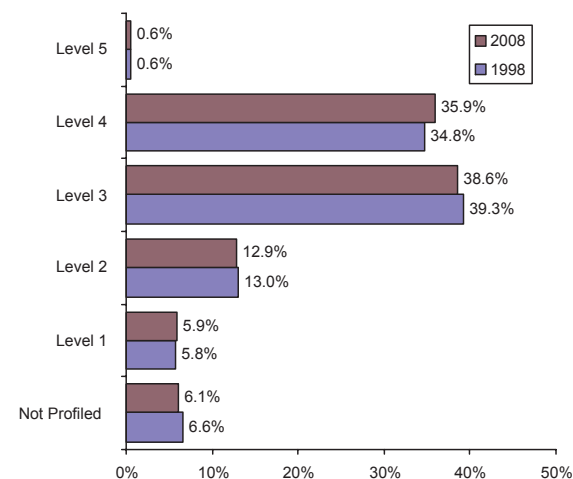
Level 4:

- Write messages that are clear and generally consistent with standard business English, but may contain a few minor errors in grammar and punctuation, and/or the writing style may lack clear organization and appropriate transitions.

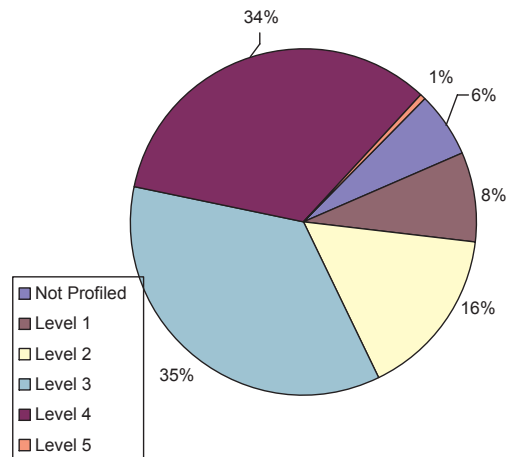
Level 5:

- Write messages that are clear and highly consistent with standard business English.
- Use good sentence structure with a smooth, logical style and no mechanical errors.

The following figure details the percentage of overall jobs in the Roanoke MSA in 1998 and 2008 by required *Writing* skills level, as determined by the ACT occupation skills profiles. The second figure provides a similar breakdown for projected annual job openings between 1998 and 2008. These data show that the majority of jobs will require workers with Level 3 and Level 4 *Writing* skills.



Proportion of Jobs In the Roanoke MSA by Required Skill Level – Writing



Annual Openings in the Roanoke MSA by Required Skill Level – Writing



Graduate Data

As a compliment to the prior two sections which detailed the likely demand for skilled workers in the region, this section provides data on the current supply

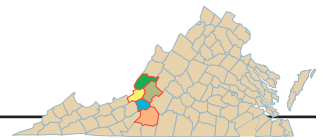
of graduates within WIA III. These data reflect number of graduates, by institution, and by academic program for the 2002-2003 academic year.¹

Institution	Program (CIP Code)	Cert. <1 yr.	Cert. >1 <2 yr.	Assoc.	BA	1st Prof.	MA	PH.D.
Dabney S. Lancaster CC	Forest Products Tech./Technician (03.0404)	0	0	3	0	0	0	0
Dabney S. Lancaster CC	Architectural Engineering Tech./Technician (15.0101)	0	1	0	0	0	0	0
Dabney S. Lancaster CC	Liberal Art and Sciences, General Studies and Humanities, Other (24.0199)	0	0	34	0	0	0	0
Dabney S. Lancaster CC	Protective Services, Other (43.9999)	0	1	4	0	0	0	0
Dabney S. Lancaster CC	Mental Health Services, Other (51.1599)	17	0	0	0	0	0	0
Dabney S. Lancaster CC	Nursing (R.N. Training) (51.1601)	0	2	26	0	0	0	0
Dabney S. Lancaster CC	Health Professions and Related Sciences, Other (51.9999)	0	1	0	0	0	0	0
Dabney S. Lancaster CC	Business, General (52.0101)	0	0	1	0	0	0	0
Dabney S. Lancaster CC	Administrative Assistant/Secretarial Science, General (52.0401)	0	0	4	0	0	0	0
Dabney S. Lancaster CC	Management Information Systems and Business Data Processing, General (52.1201)	0	0	1	0	0	0	0
Virginia Western CC	Agricultural Business and Management, General (01.0101)	0	0	4	0	0	0	0
Virginia Western CC	Radio and Television Broadcasting Tech./Technician (10.0104)	0	0	7	0	0	0	0
Virginia Western CC	Special Education, Other (13.1099)	0	1	12	0	0	0	0
Virginia Western CC	Education, General (13.0101)	0	0	2	0	0	0	0
Virginia Western CC	Engineering, General (14.0101)	0	0	10	0	0	0	0
Virginia Western CC	Mechanical Engineering-Related Technol./Technicians, Other (15.0899)	0	0	9	0	0	0	0
Virginia Western CC	Electrical and Electronic Engin.-Related Technol./Technicians, Other (15.0399)	0	0	8	0	0	0	0
Virginia Western CC	Environmental Control Technol./Technicians, Other (15.0599)	0	5	0	0	0	0	0
Virginia Western CC	Architectural Engineering Tech./Technician (15.0101)	0	2	0	0	0	0	0

¹ Source: State Council of Higher Education for Virginia, Research Report C1, Completion Summary. Where data for 2002-2003 were not available, 2001-2002 data have been used.

Education Profile

WIA III



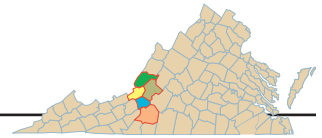
Institution	Program (CIP Code)	Cert. <1 yr.	Cert. >1 <2 yr.	Assoc.	BA	1st Prof.	MA	PH.D.
Virginia Western CC	Civil Engineering/Civil Tech./Technician (15.0201)	0	0	4	0	0	0	0
Virginia Western CC	General Studies (24.0102)	0	0	82	0	0	0	0
Virginia Western CC	Liberal Arts and Sciences/Liberal Studies (24.0101)	0	0	9	0	0	0	0
Virginia Western CC	Biological and Physical Sciences (30.0101)	0	0	35	0	0	0	0
Virginia Western CC	Protective Services, Other (43.9999)	0	0	33	0	0	0	0
Virginia Western CC	Social Sciences, General (45.0101)	0	0	28	0	0	0	0
Virginia Western CC	Graphic and Printing Equipment Operator, General (48.0201)	0	0	23	0	0	0	0
Virginia Western CC	Mental Health Services, Other (51.1599)	134	0	0	0	0	0	0
Virginia Western CC	Nursing (R.N. Training) (51.1601)	0	11	41	0	0	0	0
Virginia Western CC	Medical Radiologic Tech./Technician (51.0907)	0	0	11	0	0	0	0
Virginia Western CC	Dental Hygienist (51.0602)	0	0	21	0	0	0	0
Virginia Western CC	Psychiatric/Mental Health Services Technician (51.1502)	0	0	25	0	0	0	0
Virginia Western CC	Administrative Assistant/Secretarial Science, General (52.0401)	0	4	14	0	0	0	0
Virginia Western CC	Business, General (52.0101)	0	0	41	0	0	0	0
Virginia Western CC	Business Administration and Management, General (52.0201)	0	0	41	0	0	0	0
Virginia Western CC	Management Information Systems and Business Data Processing, General (52.1201)	0	0	7	0	0	0	0
Ferrum College	Horticulture Science (02.0403)	0	0	0	1	0	0	0
Ferrum College	Agriculture/Agricultural Sciences, General (02.0101)	0	0	0	2	0	0	0
Ferrum College	Environmental Science/Studies (03.0102)	0	0	0	9	0	0	0
Ferrum College	Computer Science (11.0701)	0	0	0	5	0	0	0
Ferrum College	Information Sciences and Systems (11.0401)	0	0	0	8	0	0	0
Ferrum College	Physical Education Teaching and Coaching (13.1314)	0	0	0	9	0	0	0
Ferrum College	English Language and Literature, General (23.0101)	0	0	0	6	0	0	0
Ferrum College	General Studies (24.0102)	0	0	0	6	0	0	0
Ferrum College	Liberal Arts and Sciences/Liberal Studies (24.0101)	0	0	0	7	0	0	0
Ferrum College	Biology, General (26.0101)	0	0	0	3	0	0	0
Ferrum College	Mathematics (27.0101)	0	0	0	4	0	0	0



Institution	Program (CIP Code)	Cert. <1 yr.	Cert. >1 <2 yr.	Assoc.	BA	1st Prof.	MA	PH.D.
Ferrum College	Parks, Recreation and Leisure Studies (31.0101)	0	0	0	5	0	0	0
Ferrum College	Parks, Recreation, Leisure and Fitness Studies, Other (31.9999)	0	0	0	2	0	0	0
Ferrum College	Philosophy (38.0101)	0	0	0	1	0	0	0
Ferrum College	Religion/Religious Studies (38.0201)	0	0	0	2	0	0	0
Ferrum College	Psychology, General (42.0101)	0	0	0	7	0	0	0
Ferrum College	Criminal Justice Studies (43.0104)	0	0	0	15	0	0	0
Ferrum College	Social Work (44.0701)	0	0	0	7	0	0	0
Ferrum College	History, General (45.0801)	0	0	0	5	0	0	0
Ferrum College	Social Sciences, General (45.0101)	0	0	0	3	0	0	0
Ferrum College	Political Science, General (45.1001)	0	0	0	1	0	0	0
Ferrum College	Drama/Theater Arts, General (50.0501)	0	0	0	2	0	0	0
Ferrum College	Art, General (50.0701)	0	0	0	7	0	0	0
Ferrum College	Health and Medical Preparatory Programs, Other (51.1199)	0	0	0	6	0	0	0
Ferrum College	Business Administration and Management, General (52.0201)	0	0	0	18	0	0	0
Ferrum College	Accounting (52.0301)	0	0	0	6	0	0	0
Hollins Univ	Women's Studies (05.0207)	0	0	0	4	0	0	0
Hollins Univ	Communications, General (09.0101)	0	0	0	18	0	0	0
Hollins Univ	Computer and Information Sciences, Other (11.9999)	0	0	0	0	0	8	0
Hollins Univ	General Teacher Education, Other (13.1299)	0	0	0	0	0	32	0
Hollins Univ	Classics and Classical Languages and Literatures (16.1201)	0	0	0	2	0	0	0
Hollins Univ	Spanish Language and Literature (16.0905)	0	0	0	3	0	0	0
Hollins Univ	German Language and Literature (16.0501)	0	0	0	1	0	0	0
Hollins Univ	French Language and Literature (16.0901)	0	0	0	5	0	0	0
Hollins Univ	English Language and Literature, General (23.0101)	0	0	0	41	0	0	0
Hollins Univ	English Creative Writing (23.0501)	0	0	0	0	0	14	0
Hollins Univ	English Language and Literature/Letters, Other (23.9999)	0	0	0	0	0	6	0
Hollins Univ	Humanities/Humanistic Studies (24.0103)	0	0	0	0	0	14	0
Hollins Univ	Biology, General (26.0101)	0	0	0	10	0	0	0

Education Profile

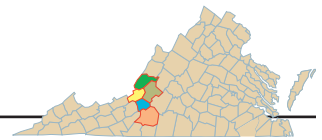
WIA III



Institution	Program (CIP Code)	Cert. <1 yr.	Cert. >1 <2 yr.	Assoc.	BA	1st Prof.	MA	PH.D.
Hollins Univ	Multi/Interdisciplinary Studies, Other (30.9999)	0	0	0	7	0	9	0
Hollins Univ	Philosophy (38.0101)	0	0	0	3	0	0	0
Hollins Univ	Religion/Religious Studies (38.0201)	0	0	0	1	0	0	0
Hollins Univ	Chemistry, General (40.0501)	0	0	0	5	0	0	0
Hollins Univ	Psychology, General (42.0101)	0	0	0	19	0	0	0
Hollins Univ	Political Science, General (45.1001)	0	0	0	7	0	0	0
Hollins Univ	Sociology (45.1101)	0	0	0	5	0	0	0
Hollins Univ	International Relations and Affairs (45.0901)	0	0	0	3	0	0	0
Hollins Univ	History, General (45.0801)	0	0	0	7	0	0	0
Hollins Univ	Economics, General (45.0601)	0	0	0	4	0	0	0
Hollins Univ	Social Sciences, General (45.0101)	0	0	0	0	0	13	0
Hollins Univ	Art History, Criticism and Conservation (50.0703)	0	0	0	12	0	0	0
Hollins Univ	Fine/Studio Arts (50.0702)	0	0	0	10	0	0	0
Hollins Univ	Music, General (50.0901)	0	0	0	1	0	0	0
Hollins Univ	Film/Video and Photographic Arts, Other (50.0699)	0	0	0	6	0	0	0
Hollins Univ	Playwriting and Screenwriting (50.0504)	0	0	0	0	0	1	0
Hollins Univ	Dance (50.0301)	0	0	0	5	0	0	0
Hollins Univ	Business, General (52.0101)	0	0	0	13	0	0	0
Roanoke College	Natural Resources Management and Policy (03.0201)	0	0	0	2	0	0	0
Roanoke College	Environmental Science/Studies (03.0102)	0	0	0	5	0	0	0
Roanoke College	Computer Science (11.0701)	0	0	0	3	0	0	0
Roanoke College	Information Sciences and Systems (11.0401)	0	0	0	2	0	0	0
Roanoke College	French Language and Literature (16.0901)	0	0	0	2	0	0	0
Roanoke College	Spanish Language and Literature (16.0905)	0	0	0	8	0	0	0
Roanoke College	English Language and Literature, General (23.0101)	0	0	0	39	0	0	0
Roanoke College	Biochemistry (26.0202)	0	0	0	8	0	0	0
Roanoke College	Biology, General (26.0101)	0	0	0	15	0	0	0
Roanoke College	Mathematics (27.0101)	0	0	0	5	0	0	0
Roanoke College	Health and Physical Education, General (31.0501)	0	0	0	15	0	0	0
Roanoke College	Athletic Training and Sports Medicine (31.0503)	0	0	0	7	0	0	0



Institution	Program (CIP Code)	Cert. <1 yr.	Cert. >1 <2 yr.	Assoc.	BA	1st Prof.	MA	PH.D.
Roanoke College	Philosophy and Religion (38.9999)	0	0	0	1	0	0	0
Roanoke College	Religion/Religious Studies (38.0201)	0	0	0	8	0	0	0
Roanoke College	Philosophy (38.0101)	0	0	0	1	0	0	0
Roanoke College	Chemistry, General (40.0501)	0	0	0	1	0	0	0
Roanoke College	Psychology, General (42.0101)	0	0	0	48	0	0	0
Roanoke College	Criminal Justice Studies (43.0104)	0	0	0	15	0	0	0
Roanoke College	Economics, General (45.0601)	0	0	0	6	0	0	0
Roanoke College	Sociology (45.1101)	0	0	0	34	0	0	0
Roanoke College	Political Science, General (45.1001)	0	0	0	7	0	0	0
Roanoke College	History, General (45.0801)	0	0	0	26	0	0	0
Roanoke College	International Relations and Affairs (45.0901)	0	0	0	16	0	0	0
Roanoke College	Drama/Theater Arts, General (50.0501)	0	0	0	5	0	0	0
Roanoke College	Music, General (50.0901)	0	0	0	5	0	0	0
Roanoke College	Art, General (50.0701)	0	0	0	11	0	0	0
Roanoke College	Business Administration and Management, General (52.0201)	0	0	0	91	0	0	0



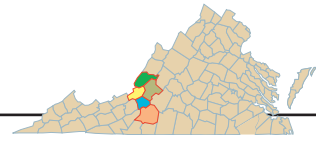
WIA III Training Providers List

Provider Name	Contact Information	List of Programs/Courses
ATI Hollywood	3535-D Franklin Road Roanoke VA 24014 Phone: 540-982-0089 Email: ATIHollywood@aol.com Web: www.atihollywood.com	Basic Cosmetology
Carilion - Roanoke Memorial Hospital	Bellevue Avenue at Jefferson Street Roanoke VA 24033-3367 Phone: 540-981-7000 Email: fkeys@carilion.com Web: www.carilion.com	Licensed Practical Nurse Nurse Aid
College of Health Sciences	920 South Jefferson Street Roanoke VA 24031-3186 Phone: 888-985-8483 Email: htann@health.chs.edu Web: www.chs.edu	College Course
Dabney S. Lancaster Community College	1000 Dabney Drive Clifton Forge VA 24422 Phone: 540-863-2800 Email: gjohnson@dl.vccs.edu Web: www.dl.cc.va.us	College Courses
Dominion College	5372 Fallowater Lane Roanoke VA 24014 Phone: 540-776-8381 Web: www.dominioncollege.org	College Courses
ECPI Technical College	5234 Airport Rd Roanoke VA 24012 Phone: 540-563-8000 Email: dmixmap@ecpi.edu Web: www.ecpi.edu	Computer Network Technology
Electrical Joint Apprenticeship Committee	PO Box 982 Roanoke VA 24005 Phone: 540-563-0615 Web: www.njatc.org	Electrical Apprentice
Franklin County Public Schools	70 Wray Street Rocky Mount VA 24151 Phone: 540-483-0179 Email: phslider@yahoo.com Web: www.frco.k12.va.us	GED Test
Hollins University	PO Box 9718 Roanoke VA 24019 Phone: 540-362-6332 Email: huadm@hollins.edu Web: www.hollins.edu	College Courses



WIA III Training Providers List (continued)

Provider Name	Contact Information	List of Programs/Courses
Jackson River Technical Center	105 East Country Club Lane Covington VA 24426 Phone: 540-862-1308 Email: jrtcdir06@yahoo.com	Vocational-Technical Training
Moseley Dickinson Academy	1727 Peters Creek Rd Roanoke VA 24017 Phone: 540-562-2575	Real Estate Appraisal Trainee Real Estate Principles
National College of Business and Technology	1813 East Main St Salem VA 24153 Phone: 540-986-1800 Email: adm@educorp.edu Web: www.nationalbusiness.edu	Accounting Accounting Diploma Accounting-Bachelor of Business Administration Administrative Office Specialist Business Administration Computer Software Specialist Computer Systems Management Hospitality Management Hospitality Services Management Management - Bachelor of Business Medical Assisting Medical Billing and Coding Medical Transcription Office Administration Professional Secretarial Science Retail Merchandising Tourism Services Travel and Tourism
Roanoke Area Electrical JATC	6306 Peters Creek Rd Roanoke VA 24005 Phone: 540-563-0615 Web: www.njatc.org	Electrician
Roanoke City Public Schools	107 Church Ave, SW P. O. Box 13145 Roanoke VA 24013 Phone: 540-853-1644 Web: www.roanoke.k12.va.us	Vocational Training
Roanoke County Public Schools	1758 Boulevard Salem VA 24153 Phone: 540-857-5040 Email: rjohnson@rcs.k12.va.us Web: www.rcs.k12.va.us	Adult Education
Virginia Western Community College	Colonial Avenue P.O. Box 14007 Roanoke VA 24038-4007 Phone: 540-857-7543 Email: gwilson-rhone@vw.vccs.edu Web: www.vw.cc.va.us	College Courses





V. Summary and Conclusions

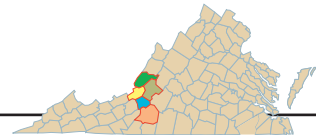
Population trends in WIA III, as in other parts of the United States, are currently dominated by the aging of the baby-boom generation. Between 2000 and 2010 this demographic phenomena will cause a major increase in the 55 and over population within the region. The net result of this increase will be a significant “graying” of the overall population.

One implication of this is that younger entry-level workers will be in short supply. This should elevate the importance of workforce services in facilitating the efficient and effective use of existing labor resources by getting younger trained workers into the workforce, and retraining or upgrading the skills of older displaced workers.

Another significant trend within WIA II has to do with continued softening in Manufacturing employment (the second largest employment sector in the local economy), coupled with increasing employment in Services (especially health care and education) and Retail Trade.

One implication of this shift is likely to be downward pressure on wages. Whereas Manufacturing comprised the 7th highest wage sector in the local economy, Retail Trade ranks 18th, Education 15th, and Health 10th.

Finally, it is important to note the likely effect that a shift away from Manufacturing and toward Services and Retail Trade will have on the occupation-driven demand for training and worker skills. As demonstrated in this report, it can be anticipated that employment increases in the Service sector – specifically, health care and education – are likely to account for much of the demand for trained workers between 1998 and 2008. These employment increases are also likely to place upward pressure on required worker skills in *locating information* and *writing*.



Average Weekly Wage

Allegheny County

INDUSTRY SECTOR	2002 (\$)
****TOTAL****	503
AGRICULTURE	315
MINING	D
UTILITIES	D
CONSTRUCTION	532
MANUFACTURING	597
TRADE-WHOLESALE	571
TRADE-RETAIL	339
TRANSPORTATION	515
INFORMATION	D
FINANCE/INSURNC	509
REAL ESTATE	304
PROF/TECH SERV	1,169
MANAGMNT OF COS	D
ADMIN/WASTE SER	D
EDUCATIONAL SER	D
HEALTH CARE	609
ARTS/ENTER/REC	253
ACCOMMDATN/FOOD	164
OTHER SERVICES	413
GOVT TOTAL	490
GOVT FEDERAL	723
GOVT STATE	506
GOVT LOCAL	482
UNCLASSIFIED	0

Botetourt County

INDUSTRY SECTOR	2002 (\$)
****TOTAL****	559
AGRICULTURE	557
MINING	D
UTILITIES	206
CONSTRUCTION	604
MANUFACTURING	694
TRADE-WHOLESALE	641
TRADE-RETAIL	284
TRANSPORTATION	611
INFORMATION	D
FINANCE/INSURNC	504
REAL ESTATE	487
PROF/TECH SERV	864
MANAGMNT OF COS	D
ADMIN/WASTE SER	486
EDUCATIONAL SER	D
HEALTH CARE	424
ARTS/ENTER/REC	327
ACCOMMDATN/FOOD	220
OTHER SERVICES	346
GOVT TOTAL	590
GOVT FEDERAL	671
GOVT STATE	644
GOVT LOCAL	575
UNCLASSIFIED	0

"D" indicates nondisclosed data.

Source: Covered Employment and Wage data, Annualized 2002.



Average Weekly Wage

Craig County

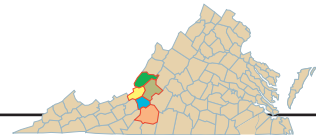
INDUSTRY SECTOR	2002 (\$)
****TOTAL****	441
AGRICULTURE	253
MINING	D
UTILITIES	D
CONSTRUCTION	356
MANUFACTURING	D
TRADE-WHOLESALE	506
TRADE-RETAIL	240
TRANSPORTATION	437
INFORMATION	D
FINANCE/INSURNC	D
REAL ESTATE	493
PROF/TECH SERV	888
MANAGMNT OF COS	D
ADMIN/WASTE SER	D
EDUCATIONAL SER	D
HEALTH CARE	D
ARTS/ENTER/REC	D
ACCOMMDATN/FOOD	217
OTHER SERVICES	198
GOVT TOTAL	497
GOVT FEDERAL	697
GOVT STATE	660
GOVT LOCAL	458
UNCLASSIFIED	0

Franklin County

INDUSTRY SECTOR	2002 (\$)
****TOTAL****	472
AGRICULTURE	463
MINING	D
UTILITIES	D
CONSTRUCTION	423
MANUFACTURING	574
TRADE-WHOLESALE	645
TRADE-RETAIL	354
TRANSPORTATION	488
INFORMATION	518
FINANCE/INSURNC	631
REAL ESTATE	401
PROF/TECH SERV	481
MANAGMNT OF COS	D
ADMIN/WASTE SER	377
EDUCATIONAL SER	D
HEALTH CARE	510
ARTS/ENTER/REC	287
ACCOMMDATN/FOOD	184
OTHER SERVICES	316
GOVT TOTAL	547
GOVT FEDERAL	667
GOVT STATE	641
GOVT LOCAL	529
UNCLASSIFIED	0

"D" indicates nondisclosed data.

Source: Covered Employment and Wage data, Annualized 2002.



Average Weekly Wage

Roanoke County

INDUSTRY SECTOR	2002 (\$)
****TOTAL****	580
AGRICULTURE	294
MINING	D
UTILITIES	D
CONSTRUCTION	576
MANUFACTURING	881
TRADE-WHOLESALE	726
TRADE-RETAIL	436
TRANSPORTATION	505
INFORMATION	797
FINANCE/INSURNC	715
REAL ESTATE	507
PROF/TECH SERV	645
MANAGMNT OF COS	873
ADMIN/WASTE SER	324
EDUCATIONAL SER	521
HEALTH CARE	580
ARTS/ENTER/REC	231
ACCOMMDATN/FOOD	210
OTHER SERVICES	381
GOVT TOTAL	609
GOVT FEDERAL	724
GOVT STATE	666
GOVT LOCAL	598
UNCLASSIFIED	0

Covington city

INDUSTRY SECTOR	2002 (\$)
****TOTAL****	645
AGRICULTURE	296
MINING	D
UTILITIES	D
CONSTRUCTION	590
MANUFACTURING	D
TRADE-WHOLESALE	615
TRADE-RETAIL	321
TRANSPORTATION	638
INFORMATION	505
FINANCE/INSURNC	531
REAL ESTATE	288
PROF/TECH SERV	405
MANAGMNT OF COS	D
ADMIN/WASTE SER	392
EDUCATIONAL SER	D
HEALTH CARE	492
ARTS/ENTER/REC	D
ACCOMMDATN/FOOD	215
OTHER SERVICES	258
GOVT TOTAL	555
GOVT FEDERAL	717
GOVT STATE	486
GOVT LOCAL	530
UNCLASSIFIED	0

"D" indicates nondisclosed data.

Source: Covered Employment and Wage data, Annualized 2002.



Average Weekly Wage

Roanoke city

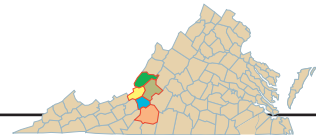
INDUSTRY SECTOR	2002 (\$)
****TOTAL****	617
AGRICULTURE	D
MINING	D
UTILITIES	D
CONSTRUCTION	595
MANUFACTURING	669
TRADE-WHOLESALE	794
TRADE-RETAIL	394
TRANSPORTATION	548
INFORMATION	787
FINANCE/INSURNC	1,097
REAL ESTATE	473
PROF/TECH SERV	889
MANAGMNT OF COS	1,123
ADMIN/WASTE SER	332
EDUCATIONAL SER	416
HEALTH CARE	716
ARTS/ENTER/REC	356
ACCOMMDATN/FOOD	232
OTHER SERVICES	378
GOVT TOTAL	690
GOVT FEDERAL	988
GOVT STATE	606
GOVT LOCAL	601
UNCLASSIFIED	0

Salem city

INDUSTRY SECTOR	2002 (\$)
****TOTAL****	645
AGRICULTURE	D
MINING	D
UTILITIES	D
CONSTRUCTION	607
MANUFACTURING	862
TRADE-WHOLESALE	713
TRADE-RETAIL	418
TRANSPORTATION	608
INFORMATION	972
FINANCE/INSURNC	737
REAL ESTATE	401
PROF/TECH SERV	877
MANAGMNT OF COS	D
ADMIN/WASTE SER	681
EDUCATIONAL SER	D
HEALTH CARE	655
ARTS/ENTER/REC	225
ACCOMMDATN/FOOD	201
OTHER SERVICES	412
GOVT TOTAL	748
GOVT FEDERAL	1,026
GOVT STATE	598
GOVT LOCAL	546
UNCLASSIFIED	0

"D" indicates nondisclosed data.

Source: Covered Employment and Wage data, Annualized 2002.



Unemployment Rate Trends

Alleghany County

Year	Rate
2002	4.8
2001	3.6
2000	3.0
1999	5.9
1998	5.1

Year	Rate
1997	5.8
1996	5.6
1995	6.0
1994	8.6
1993	7.0

Botetourt County

Year	Rate
2002	3.0
2001	2.3
2000	1.2
1999	1.8
1998	2.4

Year	Rate
1997	3.1
1996	2.5
1995	2.6
1994	3.2
1993	4.2

Craig County

Year	Rate
2002	3.7
2001	3.3
2000	2.6
1999	4.2
1998	7.0

Year	Rate
1997	4.4
1996	4.4
1995	4.6
1994	5.8
1993	6.1

Franklin County

Year	Rate
2002	5.9
2001	4.7
2000	3.6
1999	4.1
1998	2.8

Year	Rate
1997	3.8
1996	5.1
1995	5.4
1994	4.8
1993	4.2

Roanoke County

Year	Rate
2002	2.4
2001	1.9
2000	1.1
1999	1.3
1998	1.6

Year	Rate
1997	2.4
1996	2.2
1995	2.2
1994	2.8
1993	3.9

Covington city

Year	Rate
2002	6.6
2001	5.7
2000	4.8
1999	7.5
1998	5.7

Year	Rate
1997	8.8
1996	8.0
1995	9.7
1994	11.8
1993	10.0

Roanoke city

Year	Rate
2002	4.7
2001	3.6
2000	2.2
1999	2.6
1998	2.9

Year	Rate
1997	4.3
1996	3.8
1995	3.6
1994	4.5
1993	5.7

Salem city

Year	Rate
2002	3.1
2001	2.4
2000	1.2
1999	1.6
1998	2.4

Year	Rate
1997	3.0
1996	2.4
1995	2.5
1994	2.9
1993	3.5

Source: Local Area Unemployment Statistics.



Population by Age

*Alleghany County**

	1990	2000	2010	2020	2030
0-14	3,411	3,157	3,227	3,459	3,560
15-24	2,271	1,789	1,664	1,382	1,500
25-34	2,462	1,982	2,762	2,687	2,542
35-44	2,660	2,569	2,397	2,737	2,913
45-54	2,197	2,563	2,238	1,792	1,937
55+	4,854	5,155	4,111	3,943	3,548
Total	17,855	17,215	16,400	16,000	16,000

Botetourt County

	1990	2000	2010	2020	2030
0-14	4,687	5,835	4,323	5,776	6,898
15-24	3,217	3,058	3,891	2,602	3,684
25-34	3,809	3,358	4,386	5,123	3,972
35-44	4,374	5,442	3,663	4,088	5,444
45-54	3,293	5,242	6,002	3,988	4,299
55+	5,612	7,561	11,734	15,923	16,802
Total	24,992	30,496	34,000	37,500	41,100

Craig County

	1990	2000	2010	2020	2030
0-14	842	995	780	871	1,061
15-24	546	535	712	490	616
25-34	700	633	748	974	653
35-44	687	877	586	732	937
45-54	530	777	939	598	749
55+	1,067	1,274	1,936	2,536	2,784
Total	4,372	5,091	5,700	6,200	6,800

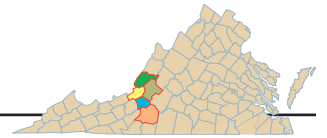
Franklin County

	1990	2000	2010	2020	2030
0-14	7,442	8,719	8,101	9,794	11,433
15-24	6,176	5,617	6,491	5,762	6,698
25-34	6,088	5,726	6,951	8,232	6,391
35-44	6,048	7,605	6,063	7,198	8,349
45-54	4,687	7,213	8,193	6,055	7,664
55+	9,108	12,406	17,402	21,758	23,866
Total	39,549	47,286	53,200	58,800	64,400

2010 - 2030 data are projections.

Source: Virginia Employment Commission 8/03, U.S. Census Bureau.

*Revised to include Clifton Forge city.



Population by Age

Roanoke County

	1990	2000	2010	2020	2030
0-14	14,427	16,045	15,056	15,995	19,226
15-24	10,514	9,146	10,204	9,708	10,530
25-34	11,585	9,782	10,934	12,094	9,807
35-44	14,077	13,843	9,462	11,193	13,279
45-54	10,012	14,240	14,265	9,907	10,896
55+	18,717	22,722	30,579	36,103	35,762
Total	79,332	85,778	90,500	95,000	99,500

Covington city

	1990	2000	2010	2020	2030
0-14	1,182	1,139	1,027	940	747
15-24	920	727	838	702	599
25-34	1,009	818	706	603	678
35-44	872	837	527	568	660
45-54	736	818	753	608	507
55+	2,272	1,964	2,148	2,379	2,510
Total	6,991	6,303	6,000	5,800	5,700

Roanoke city

	1990	2000	2010	2020	2030
0-14	17,985	18,383	16,142	18,017	17,857
15-24	12,709	10,818	12,045	8,184	10,199
25-34	17,162	14,400	14,880	15,670	11,350
35-44	14,208	14,548	9,675	10,453	12,283
45-54	8,820	13,098	12,049	8,239	9,108
55+	25,513	23,664	28,609	31,836	31,602
Total	96,397	94,911	93,400	92,400	92,400

Salem city

	1990	2000	2010	2020	2030
0-14	3,896	4,216	3,795	4,574	4,559
15-24	3,734	3,836	4,205	2,897	3,906
25-34	3,476	2,909	3,133	3,470	2,523
35-44	3,534	3,708	2,431	2,706	3,170
45-54	2,608	3,456	3,331	2,210	2,444
55+	6,508	6,622	8,505	10,044	9,698
Total	23,756	24,747	25,400	25,900	26,300

2010 - 2030 data are projections.

Source: Virginia Employment Commission 8/03, U.S. Census Bureau.



Employment by Industry

Alleghany County

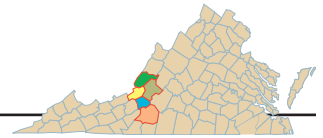
INDUSTRY SECTOR	2002
****TOTAL****	4,779
AGRICULTURE	16
MINING	D
UTILITIES	D
CONSTRUCTION	238
MANUFACTURING	1,144
TRADE-WHOLESALE	37
TRADE-RETAIL	413
TRANSPORTATION	126
INFORMATION	D
FINANCE/INSURNC	44
REAL ESTATE	13
PROF/TECH SERV	29
MANAGMNT OF COS	D
ADMIN/WASTE SER	D
EDUCATIONAL SER	D
HEALTH CARE	949
ARTS/ENTER/REC	39
ACCOMMDATN/FOOD	371
OTHER SERVICES	142
GOVT TOTAL	1,137
GOVT FEDERAL	18
GOVT STATE	216
GOVT LOCAL	903
UNCLASSIFIED	0

Botetourt County

INDUSTRY SECTOR	2002
****TOTAL****	8,172
AGRICULTURE	93
MINING	D
UTILITIES	9
CONSTRUCTION	851
MANUFACTURING	1,771
TRADE-WHOLESALE	641
TRADE-RETAIL	803
TRANSPORTATION	561
INFORMATION	D
FINANCE/INSURNC	121
REAL ESTATE	54
PROF/TECH SERV	239
MANAGMNT OF COS	D
ADMIN/WASTE SER	235
EDUCATIONAL SER	D
HEALTH CARE	380
ARTS/ENTER/REC	76
ACCOMMDATN/FOOD	599
OTHER SERVICES	159
GOVT TOTAL	1,214
GOVT FEDERAL	59
GOVT STATE	168
GOVT LOCAL	988
UNCLASSIFIED	0

"D" indicates nondisclosed data.

Source: Covered Employment and Wage data, Annualized 2002.



Employment by Industry

Craig County

INDUSTRY SECTOR	2002
****TOTAL****	554
AGRICULTURE	6
MINING	D
UTILITIES	D
CONSTRUCTION	18
MANUFACTURING	D
TRADE-WHOLESALE	11
TRADE-RETAIL	75
TRANSPORTATION	16
INFORMATION	D
FINANCE/INSURNC	D
REAL ESTATE	4
PROF/TECH SERV	10
MANAGMNT OF COS	D
ADMIN/WASTE SER	D
EDUCATIONAL SER	D
HEALTH CARE	D
ARTS/ENTER/REC	D
ACCOMMDATN/FOOD	50
OTHER SERVICES	20
GOVT TOTAL	244
GOVT FEDERAL	30
GOVT STATE	9
GOVT LOCAL	206
UNCLASSIFIED	0

Franklin County

INDUSTRY SECTOR	2002
****TOTAL****	12,793
AGRICULTURE	131
MINING	D
UTILITIES	D
CONSTRUCTION	1,131
MANUFACTURING	3,047
TRADE-WHOLESALE	499
TRADE-RETAIL	1,730
TRANSPORTATION	193
INFORMATION	99
FINANCE/INSURNC	217
REAL ESTATE	134
PROF/TECH SERV	274
MANAGMNT OF COS	D
ADMIN/WASTE SER	720
EDUCATIONAL SER	D
HEALTH CARE	890
ARTS/ENTER/REC	192
ACCOMMDATN/FOOD	785
OTHER SERVICES	408
GOVT TOTAL	1,856
GOVT FEDERAL	115
GOVT STATE	156
GOVT LOCAL	1,584
UNCLASSIFIED	0

"D" indicates nondisclosed data.

Source: Covered Employment and Wage data, Annualized 2002.



Employment by Industry

Roanoke County

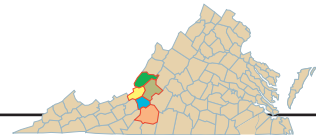
INDUSTRY SECTOR	2002
****TOTAL****	31,956
AGRICULTURE	34
MINING	D
UTILITIES	D
CONSTRUCTION	1,550
MANUFACTURING	4,238
TRADE-WHOLESALE	1,174
TRADE-RETAIL	3,687
TRANSPORTATION	911
INFORMATION	308
FINANCE/INSURNC	2,568
REAL ESTATE	471
PROF/TECH SERV	2,453
MANAGMNT OF COS	728
ADMIN/WASTE SER	2,470
EDUCATIONAL SER	649
HEALTH CARE	2,895
ARTS/ENTER/REC	506
ACCOMMDATN/FOOD	2,021
OTHER SERVICES	953
GOVT TOTAL	4,213
GOVT FEDERAL	57
GOVT STATE	585
GOVT LOCAL	3,571
UNCLASSIFIED	0

Covington city

INDUSTRY SECTOR	2002
****TOTAL****	4,846
AGRICULTURE	6
MINING	D
UTILITIES	D
CONSTRUCTION	249
MANUFACTURING	D
TRADE-WHOLESALE	65
TRADE-RETAIL	905
TRANSPORTATION	28
INFORMATION	93
FINANCE/INSURNC	126
REAL ESTATE	25
PROF/TECH SERV	44
MANAGMNT OF COS	D
ADMIN/WASTE SER	209
EDUCATIONAL SER	D
HEALTH CARE	119
ARTS/ENTER/REC	D
ACCOMMDATN/FOOD	246
OTHER SERVICES	199
GOVT TOTAL	509
GOVT FEDERAL	83
GOVT STATE	53
GOVT LOCAL	373
UNCLASSIFIED	0

"D" indicates nondisclosed data.

Source: Covered Employment and Wage data, Annualized 2002.



Employment by Industry

Roanoke city

INDUSTRY SECTOR	2002
****TOTAL****	72,766
AGRICULTURE	D
MINING	D
UTILITIES	D
CONSTRUCTION	4,426
MANUFACTURING	5,130
TRADE-WHOLESALE	2,819
TRADE-RETAIL	11,221
TRANSPORTATION	3,719
INFORMATION	2,055
FINANCE/INSURNC	3,735
REAL ESTATE	1,410
PROF/TECH SERV	3,987
MANAGMNT OF COS	3,002
ADMIN/WASTE SER	3,518
EDUCATIONAL SER	343
HEALTH CARE	10,018
ARTS/ENTER/REC	525
ACCOMMDATN/FOOD	5,932
OTHER SERVICES	2,585
GOVT TOTAL	8,100
GOVT FEDERAL	1,848
GOVT STATE	1,398
GOVT LOCAL	4,854
UNCLASSIFIED	0

Salem city

INDUSTRY SECTOR	2002
****TOTAL****	24,451
AGRICULTURE	D
MINING	D
UTILITIES	D
CONSTRUCTION	1,343
MANUFACTURING	4,975
TRADE-WHOLESALE	1,377
TRADE-RETAIL	3,404
TRANSPORTATION	720
INFORMATION	426
FINANCE/INSURNC	346
REAL ESTATE	130
PROF/TECH SERV	531
MANAGMNT OF COS	D
ADMIN/WASTE SER	558
EDUCATIONAL SER	D
HEALTH CARE	3,445
ARTS/ENTER/REC	286
ACCOMMDATN/FOOD	1,696
OTHER SERVICES	461
GOVT TOTAL	4,033
GOVT FEDERAL	1,619
GOVT STATE	658
GOVT LOCAL	1,757
UNCLASSIFIED	0

"D" indicates nondisclosed data.

Source: Covered Employment and Wage data, Annualized 2002.